DAILY METAL REPORTER

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Manager, Utah Mining Association

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TWO LINE *Editorials*

Mr. Nixon's announcement that he is willing to accept the nomination for Vice President probably holds the world's record for the least surprising statement ever made.

* * *

Maybe it's true that you can't fool all the people all the time — but that doesn't keep a lot of politicians from continuing to try.

* * *

A newly invented steering device, its inventor claims, will make it possible to drive an automobile without using the driver's hands on the wheel. But it appears that a lot of drivers are already driving that way.

* * *

Foreign nations, a magazine writer says, hate us "because we are so rich." Well, a few more years of our present give-away policies and that cause for hate will be removed.

* * *

A professional fisherman asserts that catches are smaller because the "fish are getting smarter." Well, they ought to be; they spend all their time in schools.

* * *

A magazine article is entitled "Why Does Florida Grow So Fast?" Could it be because so many people have been moving down there?

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Washington Report

May 4, 1956

LEAD and zinc mining industry leaders were reassured, during the month in review, that the Government will not neglect the industry when the long-term stockpiling program of these metals is completed.

Felix E. Wormser, Assistant Secretary of Interior, speaking at a combined meeting of the American Zinc Institute and the Lead Industries Association at St. Louis on April 24, declared himself favorable to a reasonable tax on lead and zinc imports to help maintain domestic mining operations for both defense and commercial purposes when the current Government plan of stockpiling is fulfilled. He said such a tax would serve to give the domestic producer a slightly higher price than that of the world market and at the same time would impose little penalty on the foreign producer selling in the United States markets.

Mr. Wormser also said the Administration has a program for acquiring foreign critical and strategic materials (in exchange for U. S. surplus farm commodities) over and above those needed for military stockpiling "and that these acquisitions are to be isolated from commercial markets in the same manner as the military stockpile." The important significance to the mineral industry is, he said, that such a program can serve "to lift surplus metals from the international markets and thus bring about higher prices." He suggested that several hundred million dollars worth of metals and minerals might be obtained by the Government in this manner.

Stockpile Buying

Indications were that the General Services Administration took all the lead and zinc offered to the Government when the GSA last entered the market in April, for these metals for shipment to the national stockpile. The GSA is believed to have taken about 8,000 tons of lead and 8,000 to 10,000 tons of zinc. With demand less active for lead zinc, some quarters were of the opinion that the GSA would receive increased offerings of both metals when the Government buying agency again enters the market.

Lower Copper Prices Seen

Another Government official, William A. Meissner, Jr., deputy director, Copper Division, Business and Defense Services Administration, said that prospects are that the supply of copper should be more plentiful in the last six months of 1956 and prices "should shake down to lower levels, but probably not the level prevailing in 1954."

Speaking before the Non-Ferrous Founders' Society meeting at Atlantic City on May 3, Mr. Meissner emphasized that this forecast assumes that there will be no strikes in the copper industry. "If strikes occur again for the same length of time as last year, the price of copper on the London market may soar to a new high," he warned.

Aluminum Set-Aside Cut

Aluminum also was in the news, on several fronts, during the month in review. The BDSA on April 26 announced that 142,000,000 pounds of aluminum will be set aside from the total supply available in the third quarter of 1956 to fill defense and atomic energy orders. This reserve is 8,000,000 pounds less than the amount set aside for similar orders in the 1956 second quarter. The decrease, according to BDSA spokesmen, reflect a change in military requirements.

The House, early in May, passed a bill to suspend for an additional two years, until July 16, 1958, the import duties on crude and refined bauxite. The measure has been sent to the Senate. Earlier, the House Ways and Means Committee, also approved a bill to continue for another year, until June 30, 1957, duty-free importation of metal scrap, except lead and zinc scrap.

Aluminum Scrap

Export licensing of aluminum scrap in the 1956 second quarter will be limited to 4,000 short tons, the U. S. Bureau of Foreign Commerce announced on April 17. The quota, which reflects the continued tight domestic supply situation, is a reduction of 2,000 short tons from the 6,000-ton quota set for the previous quarter.

Further restrictions on aluminum scrap exports were urged by the Aluminum Smelters Industry Advisory Committee at a meeting with BDSA and other Government agencies' representatives on April 26. Among the IAC's recommendations were: that the export quota for aluminum scrap for any one month be not more than 1,000,000 pounds, or a total of 1,500 tons per quarter, and that the Government make no stockpile call for primary aluminum in the first half of 1956.

Nickel-Bearing Scrap Curbs

The BFC also slapped more stringent controls over exports of certain nickel-bearing scrap materials for the 1956 second quarter. Effective April 17, exports of clean or contaminated nickel-copper alloy scrap, including Monel, and clean or contaminated copper-nickel alloy scrap containing 40 per cent or more copper and 5 per cent or more nickel, generally will not be approved.

Previously the copper nickel alloy scrap was included under the quantitative quota for new and old copper-base alloy scrap.

Metal Product Exports

In further action, the BFC announced on April 27 that filing dates for submission of applications to export certain selenium commodities in the third quarter of 1956 are June 1 through June 15. The dates apply to the following: powder metal, except selenium bearing scrap material; salts and compounds, including selenium dioxide; selenium containing pigments, rubber compounding agents, and ferro-selenium.

Scrap Iron Exports

Contrasting views on the question of scrap iron exports also were heard in Washington. On April 30, at a hearing of the Senate Banking and Currency subcommittee on International Finance, representatives of both the steel and scrap industries testified. All who testified favored a survey of the country's availability of scrap.

Steel industry spokesmen urged control of scrap exports because, in event of a national emergency, the U. S. would need the scrap. The scrap trade spokesman said the domestic scrap supply is adequate to meet all demands and that none of the dire predictions of the loss of production of iron and steel and of unemployment, because of an expected scrap shortage, had materialized.

Gov't Tungsten Buying Used

The need for continuation of the Government's tungsten purchase program was stressed industry spokesmen at a hearing before the Senate mineral subcommittee on April 20. The subcommittee was told that the U. S. will require ever-increasing supplies of high temperature materials — tungsten, molybdenum, tantalum and columbium — for rockets, jets, missiles and similar devices.

Warning that the domestic tungsten supply could be exhausted in 15 years, an industry spokesman urged that the Government buy up all the material that it could from abroad in addition to encouraging the exploration for increased reserves at home.

At other hearings, testimony concerning various bills to aid the domestic mining industry was heard. Passage of Senate Bill 3497 to help U. S. mercury producers was urged, and recommendations were made that the floor price for Government pur-

(Continued on page 19)

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DOMESTIC MINING INDUSTRY REQUIRES IMPORT TAX ON LEAD AND ZINC WHEN PRICES DECLINE TOO LOW

Measures Taken to Provide 'Adequate Mobilization Base' Have Not Achieved Expectations; U. S. Government Stockpiling Program Is Nearing Fulfillment

By MILES P. ROMNEY, Manager, Utah Mining Association

LEAD-zinc mining activity in the United States in the year 1955 bears a marked resemblance to a fighter who has suffered three knockdowns in the previous round and is making a valiant but weak comeback. The three knockdowns can be listed as:

1. Continuation of excessive imports of lead-zinc.

2. Closely approaching end of the stockpile program (admitted by all parties to be a temporary panacea).

3. The adverse deficit in mine operating income, resulting from year by year increased cost of production in contrast with the present, and long term average, low price of the metals produced by the lead-zinc mine operator.

The ultimate decision depends on the level of general economic activity and on the life length of the stockpile cushion. The mining industry needs help from all interested parties in its effort to make a comeback before the bell.

Present activities and conditions in lead-zinc mining are the summary of its past history. The industry's history also has a strong impact on its future. Therefore, it is pertinent to discuss or to outline some of the salient, historical facts and events of the past decade.

Depressed Conditions

The dangerously depressed condition of the domestic lead-zinc mining industry in 1953 and 1954 was officially recognized by committees of the Senate and House, by the Tariff Commission in its offical report and findings, by the Cabinet Level Committee on Minerals Policy, and by President Eisenhower. The President, therefore, in declining to act on Tariff Commission recommendations ordered the stockpiling program for those metals and requested voluntary control of excessive imports.

The year 1954 marked the low ebb of lead-zinc production. 1955 saw a modest gain from that low point of 8,000 tons of lead and 37,000 tons of zinc. A mild recovery, assisted by record peacetime consumption and the stockpiling program.

Nineteen forty-seven, and 1948 and 49 were peacetime recovery years. Regulations governing price and other operating factors had been removed and the domestic mines found opportunity to recover from the effect of war stresses. Lead and zinc made a very creditable recovery record along with other war-racked industries. In making comparisons of production and of economic factors affecting lead-zinc mining since the end of World War II controls, the average factors of those three — at least near normal — years are used as a base. Their use is also convenient for the fact that most of the Government's economic indices have now been related to the 1947-49 base.

The effects of foreign currency devaluations, increased foreign competitive production, import restrictions in marketing areas other than the United States, coupled with tariff cuts in our market, had their first heavy impact on the domestic lead-zinc miner in late 1949 in terms of excessive imports, depressed prices and shut down domestic mines. "Korea" precipitated a wild scramble for metals in 1950 and 1951, but our markets were again sought in excessive volume beginning in 1952 and continuing in varying degree to the present.

TABLE A
AVERAGE DOMESTIC CONSUMPTION OF LEAD-ZINC

	Lead	% of Base Period	Zinc	% of Base Period
1947-49 Avg.	1,023,000 tons	100%	771,967 tons	100%
1947-55 Avg.	1,118,522 tons	109%	890,095 tons	115%
1955	1,205,700 tons	117%	1,079,468 tons	140%

Production

The modest recovery of lead and zinc, in 1955, failed by a wide margin to approach the creditable production record of the 1947-48-49 period.

Examination of the records show that total United States lead production dropped to 82.4% of the base period in 1954, and recoved to 84.4% in 1955. Western States lead production in 1954 dropped to 72% of the base period and recovered to only 74.3% in 1955. West Central and Eastern States maintained a much more "normal" production level for 1955 production was 99.6% and 105.3%, respectively, of their base period production.

The data for zinc shows that total domestic zinc production dropped to 75.2% of the base period in 1954 and recovered to 81% in 1955. Western States dropped to 66.6% of the base period production in 1954 and recovered to 76.7% in 1955. The West Central States reached their low point in 1953, dropping to 64.2% of the base period. They recovered to 73.6% in 1954 and to 73.8% in 1955. The Eastern States again maintained a good record, remaining above 100 of the base period from 1950 through 1953 and then falling to only 94.0% in 1954 and 94.5% in 1955. Despite remedies provided following the great interest and concern expressed in 1953, production of lead and of zinc has failed to return to even the volume of that year.

The one-year lag of Western States in reaching the low point of zinc production as compared with the West Central States points up an interesting fact. Western mines being generally wet, deep and narrow-veined were slower to reach a shut down decision because of the attendant heavy maintenance cost and stronger threat to mine workings and ore reserves during shut down. With the generally higher cost and longer time factors involved, once closed western mines were also slower to reopen.

Consumption

Consumption in 1955 reflected the high business level. The U. S. Bureau of Mines preliminary reports show 1,078,968 tons of zinc and 1,205,700 tons of lead in 1955, increases of 202,868 and 110,829 tons, respectively, over 1954. Increases which cast in the shade the minor increases made in domestic mine production of those metals. (See Table A).

Prices

Review of the price of lead and zinc over the period of 1947 to 1955 in relation to factors governing mine

Excerpts of address before annual joint meeting of The American Zinc Institute and The Lead Institute of America, St. Louis, Mo., April 24, 1956.

production costs: Gold and silver price can properly be included also for those metals are of great economic importance to western mines. (See Table B).

The 1955 average lead price was 94.5% of the base period and zinc 101.2%. Gold and silver Treasury prices were unchanged from 1947 through 1955. The 1955 prices for total sales of all metals involved were a shade below the base period average.

Miners' wages (daily straight time rate) were up 42% in 1955 over the base period, bullion freight on lead and smelter freight on zinc were up 25.1% and the Consumers Index (generally indicative of supply cost) was up 15.5%.

Thus prices from 1947 to 1955 averaged out about even with the base period, but increased mine production costs for the same period are estimated at between 20 and 30%, varying from mine to mine and area to area.

By comparison it is of interest to note the trend of prices for copper, aluminum and cold rolled sheet over the same periods. (See Table C.)

You appreciate as well as I do that copper, aluminum and steel are a different breed of cats than lead-zinc. But I use these commodities for price increase comparisons — many other items would have served as well — to emphasize the lag of lead-zinc prices behind the trend of our domestic economy. This lag explains to a large degree the failure of major segments of the industry to respond to the artificial respiration being applied.

Stockpiling And Stocks

Treatment, for recovery from the condition officially recognized, has consisted principally of the long range stockpiling program, announced in March 1954. The price of lead increased by 1.5c and of zinc 1.25c per pound during the period between the announcement and the first purchases. Prices by the end of 1955 had risen another 1.75c for lead and 2.5c for zinc, making a total price increase since stockpiling was announced of 3.25c for lead and 3.75c for zinc.

Stockpiling and the record high level of business activity both in United States and abroad combined to make those price increases possible.

There were 210,000 tons of slab zinc in smelter stocks at the end of May, 1954, but only 41,000 tons at the end of 1955. Zinc smelter stocks decreased 83,298 tons in 1955. Lead stocks showed less variation but decreased about 70,000 tons in 1955.

The stockpiling program was estimated as of March 31, 1956, to have purchased 150,000 tons of lead and 210,000 tons of zinc. The cushion left for additional purchases would then be 50,000 tons of lead and 90,000 tons of zinc. Only minor amounts of either metal were purchased in the latter part of 1955. The cushion is, however, so small that any economic down turn or increase in imports would rapidly complete the program. A sharp upturn in stockpile offerings has been reported for both metals in March purchases. The St. Joseph Lead Company's 1955 Annual Report shows a domestic surplus of supply for 1955 of 103,000 tons of lead and 101,000 tons of zinc. Stockpiling assisted in absorbing that oversupply, but the remaining stockpile cushion will be wiped out shortly at that oversupply accumulation rate.

TABLE B
TABLE OF METAL PRICES

	Lead	% of Base Period	Zinc	% of Base Period	Silver	Gold
Avg. 1947 to 1949	16.027c	100%	12.078c	100%	90.5c	$35.00
Avg. 1947-1955	15.336	95.8%	13.120	108.6%	90.5	35.00
Avg. 1955	15.138	94.5%	12.229	101.6%	90.5	35.00
Present (Apr., '56)	16.000	99.8%	13.500	111.8%	90.5	35.00

TABLE C

	COPPER		ALUMINUM		20 GA. COLD ROLLED SHEETS	
	Price	% of Base Period	Price	% of Base Period	Price	% of Base Period
1947-49 Base	20.733c	100%	15.911c	100%	3.94c	100%
1947-1955	25.313	122	18.915	120	4.57	116
1955	37.491	181	23.668	149	5.53	140
Present	46.000	221	25.900	162	5.72	145

TABLE D
GENERAL IMPORTS OF LEAD — 1954-1955

	Jan.-Mar.	Apr.-June	Apr.-Dec.	Yr 1954	Yr 1955
Total Tons	90,206	124,332	348,997	438,203	441,648
Avg. Monthly Rate	30,070	41,444	38,777	36,517	36,804
GENERAL IMPORTS OF ZINC — 1954-1955					
Total Tons	147,437	140,814	458,283	605,720	686,979
Monthly Avg.	49,146	46,938	50,920	50,477	57,248

Imports

It is interesting to note import statistics in relation to the stockpiling program. The President directed the Secretary of State in regard to the announcement of the program, to "seek recognition of the foreign countries which are the principal suppliers of lead and zinc that this increased stockpile buying is designed to help domestic production and that they will not themselves seek to take any unfair advantage of it." The record, however, shows this request to have been ineffective. (See Table D).

Imports of lead immediately following the announcement, and up to the present, have exceeded imports of the first quarter of 1954, by amounts ranging from 7,000 to 11,000 tons per month. Zinc import quantities decreased slightly for the quarter following the announcement but have since made up that drop. The monthly import rate of zinc in 1955 was some 8,000 tons greater than the 1954 first quarter.

Score Card

The President in letters of August 23, 1954, to Senator Millikin and to Representative Reed, stated, in regard to lead-zinc, that:

"An adequate mobilization base is not being maintained."

Further in the same letter he stated:

"If the course of action above outlined has not accomplished the objectives we seek, I will be prepared early next year to consider even more far-reaching measures, and to make appropriate recommendations to the Congress."

The domestic lead-zinc mining industry, as affected by past and present conditions, which conditions include the long term stockpiling provisions, still stands in a rather precarious position. The major, adverse factors of excessive imports and of price lag compared with cost of production in our domestic economy still exist. The recovery toward "an adequate mobilization base" has been disappointing for the percentage of domestic consumption supplied by domestic mine production was not improved in the mild comeback staged by mine production in 1955. In fact, consumption increases far outstripped domestic mine production increases.

In lead, only the production of the Southeastern Missouri area, some 40% of the nation's present total production and but 18% of the total new lead demand, is in a fairly secure position. Sixty percent of domestic lead production is being mined under marginal costs, with insufficient incentive for long range investments to replace the reserves being mined and under the threatening cloud of stockpiling termination.

In zinc the present 33% of production from the Eastern States is healthy and growing. It represents but 16% of the total zinc demand. The balance of 67% of domestic zinc is produced under the same conditions as is lead. In other words, 60% of domestic lead and 67% of domestic zinc production is having a rough go and any adverse development would result in a lead-zinc depression, similar to 1952-53 and 54.

Some feel that lead-zinc is doing O. K., for the simple reason that the producing companies are making fair profits on over-all operations. Many such companies are diversified in oil, copper, uranium, aluminum, etc., and the specific contributions of the various projects don't show up in the composite earning picture. The independently owned and operated mine is the most vulnerable, and here we have seen the greatest number of

(Continued on page 19)

U. S. SLAB ZINC USE ROSE IN LAST 10 YEARS BUT UNRESTRICTED IMPORTS CUT DOMESTIC MINE OUTPUT

From 1946 to 1952 American Producers Supplied 76 to 80% of Needs; Ratio Fell to Only 50% From 1953 - 1955 Despite Record Consumption

By G. H. LEFEVRE, Vice President, U. S. Smelting, Refining and Mining Co.

CONSUMPTION of slab zinc in 1955 stood at about 1,079,000 tons, an increase of approximately 22 per cent over 1954 and an increase of approximately 40 per cent over the average consumption of the base period (1947-1949), during which base period the average yearly consumption was about 772,000 tons.

For the five-year period, 1946-1950, the average consumption was 6 per cent greater than that of the base period, and for the five-year period, 1951-1955, the average yearly consumption was 23 per cent greater than that of the base period. In other words, the growth in consumption, while not spectacular, has been steady and in the last five-year period, 1951-1955, due to developments in the die casting industry and requirements of the continuous galvanizing lines, consumption has increased sharply.

Production of slab zinc, that is the ability of the smelters to produce for the requirements of consumption, has been closely in step with the demand. In 1955 the smelter slab zinc production totaled about 1,031,000 tons. In the 1951-1955 period this production averaged 953,000 tons against the average yearly consumption requirement of 947,000 tons, and in the 1946-1950 period about 847,000 tons as against an average yearly consumption requirement of 818,000 tons.

Mine Production

Mine production in the base period was sufficient to take care of 80 per cent of the slab zinc consumption and during the 1946-1950 period was approximately 75 per cent. In 1951 and 1952, the two highest production years since 1946, mine production totaled about 681,000 and 666,000 tons, 72 per cent and 79 per cent respectively, of these years' consumption requirements, but in 1953 there was a heavy inflow of concentrates and metal of foreign origin into this country — an oversupply — and the price broke sharply necessitating the closing of many mines.

So heavy was this inflow of foreign zinc that in 1954 domestic mine production was sufficient to take care of only 53 per cent of domestic consumption, and while in 1955 there was a small increase in mine production of about 6 per cent over 1954 — to some 504,000 tons of recoverable zinc — this production was only sufficient to take care of 47 per cent of domestic consumption. In brief, slab zinc consumption in the United States has increased steadily in the last ten years but due to the unrestricted flow of foreign zinc into this country, commencing with 1953 domestic mine production has been curtailed to the extent that from 1946-1952 it came within a range of 76 per cent to 80 per cent of the consumption requirement, while in the period 1953-1955 domestic mine production was sufficient to take care of only approximately 50 per cent of the consumption requirement.

G. H. LEFEVRE

Imports of zinc (total zinc content of concentrates and slab zinc) in the base period averaged some 365,000 tons and remained relatively close to this figure through 1949, but in 1950 imports began to climb and in 1953 reached about 748,000 tons or 76 per cent of consumption requirements, 52 per cent of which was in concentrates and 24 per cent in slab. From 1953 to 1955 imports have averaged between 76 per cent and 64 per cent with the slab zinc portion running from 235,000 tons in 1953 to 196,000 tons in 1955.

A healthy zinc industry depends upon the expansion of slab zinc consumption and, as I have stated in my previous comments, the average of the two five-year periods subsequent to the base period indicates an overall steady growth in zinc consumption. The greater part of this growth has come from the increased use of zinc in die castings and from the requirement of the continuous galvanized process. An increased use, but in smaller tonnage volume, has resulted from progress in the brass industry and from other uses of zinc not including the requirements of the rolled zinc industry which has not maintained its requirement of the base period.

The galvanizing industry maintained its position in 1955 as the largest consumer of zinc. The reported consumption stands at 440,000 tons, an increase (over the base period of 360,000 tons) of some 22 per cent. Since the base period the continuous galvanizing process has made tremendous advances and at the end of 1955 twenty-six galvanizing lines were in operation, two were under construction, and some nine or ten more under consideration or in the planning stage. It is estimated that at the end of 1955 the requirement of the continuous galvanizing process was about 75 per cent of the capacity for galvanized sheet.

The product of the continuous line not only provides protection against corrosion of the base metal with a coating of improved adherence, but it also provides a ductile coating more suitable for stamping, drawing, spinning, and fabricating than the galvanized sheet produced by older methods which did not give as ductile a protective coating. We look forward to an increasing use of galvanized sheet and strip produced by the continuous process.

Die Casting Needs

Die casting industry requirements are now in total amount second only to the galvanizing requirements and in 1955 the reported use of zinc in die castings stood at about 392,000 tons, an increase of 83 per cent over the average of the base period of some 214,000 tons — an indication of the general acceptance of die casting as the most economical process for the production of finely designed nonferrous metal parts and components of exact detail. In the 1946-1950 period zinc-base die castings averaged approximately 227,000 tons and were very close to the requirement of the base period, but beginning in 1953

Excerpts of address at 38th annual meeting of American Zinc Institute, Inc., St. Louis, Mo., April 23, 1956.

consumption of zinc in die castings expanded by a very appreciable tonnage. The average for the 1951-1955 period stands at some 290,000 tons.

The largest consumer of zinc-base die castings, of course, is the automobile industry, and it is estimated that between 60 per cent and 70 per cent of the production of zinc-base die castings is for the industry, with between 15 per cent and 20 per cent going to the appliance industry. The health of the zinc-base die casting industry, therefore, is dependent to a great degree on the maintenance of high production in the automobile industry.

The brass industry has widely varying requirements for slab zinc and, in our opinion, the average yearly consumption for the base period of approximately 102,000 tons, due to a rather peculiar condition, is not in line with requirements of other consuming industries during that period. You will recall that following World War II large quantities of shell casings were returned to this country and inasmuch as these were 70/30 brass they found a ready market in the brass mills. For that reason an average of 102,000 tons in the base period we consider to be rather low — it probably should be closer to 120,000 tons, which is the average of the 1946-1950 period.

Regardless of my comment as to the requirement of the base period, the consumption of zinc in the brass industry for the 1951-1955 period was in an average yearly amount of 146,000 tons. Possibly 1955 consumption would have been greater had the necessary copper been available.

TABLE I

	YEAR or PERIOD	DIE CASTING	GALVANIZING	BRASS MAKING	ROLLED ZINC	OTHER USES*	TOTAL CONSUMPTION (Short Tons)
	1955	392,000	440,000	145,000	50,000	52,000	1,079,000
	1954	280,000	403,000	108,000	47,000	45,000	883,000
Korean Incident	1953	297,000	407,000	178,000	55,000	49,000	986,000
	1952	226,000	378,000	156,000	51,000	42,000	853,000
	1951	283,000	400,000	143,000	64,000	44,000	934,000
	1950	285,000	441,000	139,000	68,000	33,000	966,000
	1949	200,000	350,000	86,000	55,000	21,000	712,000
	1948	231,000	370,000	109,000	77,000	30,000	817,000
	1947	210,000	361,000	112,000	71,000	32,000	786,000
	1946	206,000	320,000	149,000	92,000	34,000	801,000
Base Period	1947-49	BASE PERIOD - YEARLY AVERAGE					
	1947-49	214,000	360,000	102,000	68,000	28,000	772,000
5-year Periods		FIVE-YEAR PERIOD - YEARLY AVERAGE					
	1951-55	296,000	406,000	146,000	53,000	46,000	947,000
	1946-50	227,000	368,000	119,000	73,000	30,000	817,000
	1941-45	93,000	301,000	322,000	72,000	34,000	822,000
	1936-40	88,000	260,000	155,000	56,000	35,000	594,000
	1931-35	30,000	154,000	96,000	46,000	36,000	362,000

Source: Bureau of Mines

*Includes zinc used in slush and sand castings, wet batteries, desilverized lead, light-metal alloys, zinc dust, bronze powder, chemicals, alloy dies and rods, and other miscellaneous uses which includes production of zinc oxide by the French process.

Built-In Tubes

An interesting development in the brass industry has been the introduction of built-in tubes. At present there are three producers of such product — Olin-Mathieson Chemical Corporation's "Roll-Bond," Revere Copper and Brass's "Tube-in-Strip," and Reynolds Metals Company's "Tubed Sheet." While Reynolds' product is based on aluminum, the Olin-Mathieson product and that of Revere Copper and Brass are based on copper-base alloys and aluminum. This development is interesting and without a doubt a step forward in the brass industry but, in my opinion, it will not appreciably increase the requirement for zinc.

The consumption of zinc in the rolled zinc industry in 1955 showed a small increase of about 3,000 tons over the 1954 figure, the average yearly consumption for the period 1951-1955 being at the rate of some 53,000 tons — somewhat below the base period in which the average consumption was about 68,000 tons.

Rolled zinc is principally used in the manufacture of dry cell batteries, engravers' plates, boiler and hull plates to control corrosion, weather stripping, terrazzo strip, and in miscellaneous materials for the construction industry. For a number of years prior to World War II the manufacture of mason jar caps for home canning required a substantial tonnage of zinc. From reports, apparently this type of closure is not as popular as it was in the past and has given way, in some instances, to a steel closure with a lacquered finish, also in many sections of the country home canning is on the decline.

During the past several years the "do-it-yourself" movement has had an interesting effect, in a small way, on rolled zinc requirements, and it is understood that certain rollers are marketing in limited quantities, through hardware and mail order outlets, attractive packages of rolled strip and sheet. It should not be concluded from my comments that the rolled zinc industry is not aggressive for it has been quite so over the past years. Very possible this industry has felt competition to a more marked degree than have the long-established galvanizing and brass making industries. Perhaps the rolled zinc industry may benefit, in a minor way, from the high price of copper during the last several years and the possibility of this price continuing indefinitely at a relatively high level, together with increases in the price of aluminum.

Other Uses

Other uses of zinc include oxide, lithopone, salts, stamping and forming dies, alloy rod, wire, slush and sand castings, powder metallurgy; anodes for electro-galvanizing, electro-plating, and cathodic protection; as zinc dust in sherardizing and metallizing (wire is also used), as a corrosion protection pigment in paint,

(Continued on page 19)

Your Best Market This Week For

MIXED ALUMINUM CLIPPINGS

Aluminum Smelting & Refining Co., Inc.

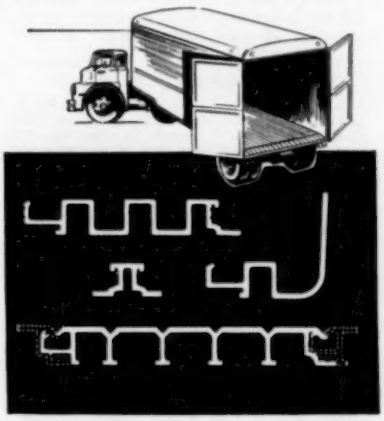
5463 DUNHAM ROAD BEDFORD, OHIO

Tel. Cleveland: MONTROSE 2-3100

BUSINESS IN MOTION

To our Colleagues in American Business . . .

A great many people have found that extruded shapes are desirable because they are produced to specific designs, thereby markedly lowering production costs. They are right, of course, but there are other benefits, now being taken advantage of by builders of truck bodies. Revere aluminum extruded shapes are produced in long lengths to meet customer specifications, and to dimensional accuracies so close that suitably designed shapes can be interlocked side by side, forming a tight and structurally strong floor assembly. This is the procedure being adopted by truck and trailer body builders.



The design is such that the shapes interlock in two directions, providing greater strength and tightness, yet assembly is easy. Another feature of the design is that the shapes used on one side of the center strip can be interlocked on the other side simply by turning them end-for-end.

Two types of floor sections are produced, one with deep channels for refrigerator trucks, or "reefers," the other with shallow V channels for dry cargo. The purpose of the deep reefer channel design is to provide the cold air circulation that is so essential to the preservation of cargo. An interesting and important feature of both types is that bolting to the truck subframe is made possible without going through the floor from inside the body. The bolts are hidden, and so leakage is prevented, there are no unsanitary areas, and no interference with loading and unloading.

Being aluminum, a truck floor made in this manner is appreciably lighter than one of the same dimensions that is all steel, or a composite of wood and steel. The result is that pay-load can be increased without danger of violating the restrictions on gross weight, or weight per axle, that are so prevalent. This alone, regardless of other advantages, is enough to make the new construction highly attractive to the trucking industry, which after all makes its money not on dead weight but on pounds of freight carried. Incidentally, freight handlers sometimes are rough, and drop heavy boxes on the truck floor. If damage results, as can happen to any floor, repairs can be quickly made, replacing only the damaged shapes without removing the entire floor. Thus the truck begins to roll again with a minimum of lost time and expense.

Revere considers that this development of aluminum extruded shapes for truck flooring is a major engineering accomplishment. The repeat orders received show that the body people and the truckers agree. However, if you do not build or buy truck bodies, just remember that American industry does not stand still, but always moves forward. It should pay you to make sure that your suppliers, no matter what you buy from them, keep you informed of every new development, as quickly as it is available.

REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

***Executive Offices:* 230 Park Avenue, New York 17, N. Y.**

ATTRIBUTE MARKED DECLINE IN U. K. COPPER PRICE TO SUPPLY FINALLY CATCHING UP WITH THE DEMAND

Tin Drop Might Have Been Steeper But for Fears Regarding Outcome of Malayan Labor Disputes; Lead Market Colorless; Russia Offering Zinc

By L. H. TARRING
London, England

May 3, 1956

APRIL was a bad month for London copper prices, and the settlement price which started at £400 on the 3rd finished the month at only £344 on the 30th. This extremely marked decline does not really need any explanation to people actively engaged in the trade. It really would seem as if at last supplies are catching up — if they have not already caught up — with demand, and this belief has been widely expressed of late by leading copper producers who ought to know.

The copper situation has, of course, been rather artificial for years past. The steady withdrawal of large tonnages to go into stockpiles in the U. S. A. and certain other countries has inflated the demand for a long time past. Had stockpiling not taken place the copper market would probably long before this have shown signs of weakness.

Another artificial factor is the discouragement of sales of the red metal to the Soviet bloc which is known to be in considerable need of additional supplies to eke out its own comparatively limited production. Despite this, there is undoubtedly a certain leakage of copper to the Soviet Union one way and another but if the embargo were lifted there is considerable reason to believe that Russia might wish to buy quite substantial quantities, both for her industries and possibly in order to accumulate some sort of reserve. No such action, however, appears to be imminent on the part of the Western Powers.

LME Prestige Enhanced

The decision to use London Metal Exchange prices in connection with sales of Chilean copper has certainly enhanced the prestige of the Exchange though it remains to be seen whether this action will bring in any more actual business.

The situation has also been somewhat bedevilled in recent times by the continual strike troubles in the U. S. A., South America and in the Rhodesian copper belt; these disturbances have robbed the world of very large quantities of the metal and aggravated the supply situation quite seriously. (There was another short-lived strike at Mufulira early in April).

Even if supply has now caught up with current demand there is still no guarantee that production will continue without interruption in the main producing centers, since it is scarcely to be believed that organized labor in those countries has suddenly changed its spots. At the same time, however, now that the market is not looking quite so strong as it did, even the workers' unions may think twice before they demand higher wages from an industry which is undergoing a quite marked setback as regards selling prices.

World production has been expanding for some time past and the formal opening of the concentrator of the Chibuluma mine of the Rhodesian Selection Trust which is scheduled to take place on May 5 is going to be followed by quite an appreciable additional quantity of ore to the world supplies. It is estimated that this particular mine contains ore reserves amounting to 7,300,000 tons of ore with an average grade of 5.23 per cent copper and 0.25 per cent cobalt. The plans are to raise about 480,000 tons of ore a year, producing 16,000 tons of copper, not to mention 500,000 pounds of cobalt. The concentrates will be smelted at Mufulira. Actually the mine has been hoisting ore since last October and the ore has been stockpiled pending the completion of the concentrator.

High prices of metals always stimulate the tapping of new ore deposits and an increase in output at existing properties and the recent boom could not be expected to prove an exception to the rule. Other big developments have been or are taking place in other parts of the world and it is possible that the forecasts made from time to time in recent years that eventually there would be a glut of copper may in the not distant future at last prove justified — after being falsified so often.

In Europe demand for copper is not so keen as on the American side of the Atlantic; and on the Continent some consumers have recently been getting rid of part of their stocks which presumably they accumulated in something of a panic. Whether the reason is in order to raise funds in these days of tighter credit or because they think that prices will go down still lower is not clear but it may be a mixture of both. In Britain home demand is being obviously affected to some degree by the tighter credit situation.

RST Price Policy

The policy of the Rhodesian Selection Trust in fixing prices does not appear to have been very successful particularly in these recent days of heavily declining prices on the London market. In fact the R. S. T. price has latterly been floundering along in the wake of the London market price and there is a feeling that the system has outlived its usefulness if it ever had any. The R. S.T. price is at present £350.

Business in semi-finished materials in Europe is reported to remain quiet, this remark applying to copper and brass sheets. It is stated that the Italians are the cheapest sellers at the moment and are presumably getting most of what business is going. Users of semis seem to be expect-

U. K. COPPER STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports a decline in stocks of both blister and refined copper at the end of February compared with end of January — totals being 16,311 tons (18,366 tons) and 55,323 tons (61,011 tons) respectively; of the latter 34,635 tons were held by consumers and 2,438 tons were in London Metal Exchange approved warehouses. Imports during the month totalled 20,109 tons and production was 10,212 tons of primary refined and 8,832 tons of secondary.

Consumption during February totalled 57,376 tons, and full details are given in the following table:-

	Feb. 1956	Jan.-Feb. 1955	Jan.-Feb. 1956
UNALLOYED COPPER PRODUCTS			
Wire (1)	21,023	35,255r	43,814
Rods Bars & Sections	1,757	2,719r	3,480
Sheet, Strip & Plate	5,407	10,641	10,374
Tubes	4,376	7,713	8,812
Castings & Misc.	650	1,000	1,300
ALLOYED COPPER PRODUCTS			
Wire	1,719	3,114	3,397
Rods, Bars & Sections	12,352	26,336	25,154
Sheet, Strip & Plate	11,222	23,113	22,303
Tubes	1,728	3,395	3,791
Castings & Misc.	6,875	11,104r	13,608
Copper Sulphate	4,513	6,499	9,140
TOTAL ALL PRODUCTS	71,622	130,889r	145,173
Copper content of output	57,376	104,072r	116,404
Consumption of refined copper (2)	40,934	78,776r	86,610
Consumption of copper & alloy scrap (3)	16,442	25,296	29,794

Note: (1) Consumption of H. H. Copper and Cadmium Copper Wire Rods for Wire and production of Wire Rods for Export. (2) Virgin and Secondary Refined Copper. (3) Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.
r - revised.

AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

(Per Long Ton)

Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange

	COPPER			TIN			LEAD		ZINC	
	Cash	3 Months	Settlement	Cash	3 Months	Settlement	Current Month	3rd Following	Current Month	3rd Following
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1954 Averages ..	248 17 11	239 17 7	249 0 11	719 8 11	709 17 7	720 6 7	98 8 12	94 7 4	78 5 4	77 16 11
1955 Averages ..	351 14 11	341 0 3	352 5 6	740 2 12	736 12 11	740 12 8	105 17 3	105 9 6	90 13 4	89 12 3
1956										
January	392 4 7	378 13 10	392 14 1	814 4 4	788 13 2	815 0 11	118 11 4	116 10 0	100 16 9	97 13 2
February	403 15 11	389 2 10	404 3 10	805 10 6	774 0 11	807 3 4	119 7 6	115 8 5	100 8 1	96 7 6
March	419 11 8	410 7 7	420 0 6	805 10 9	780 9 6	807 8 7	121 2 6	118 13 11	101 11 2	98 13 11
April	374 12 9	369 0 6	375 0 6	764 5 6	759 17 0	764 17 6	115 14 3	114 18 9	98 4 10	96 16 2

ing still lower prices and are accordingly inclined to hold off from buying.

Early in May a marked rally occurred in London but with sentiment uneasy it was doubted whether the movement would persist.

While metal prices have been declining the political atmosphere in Britain remains somewhat confused. The visit of the two Russian leaders, Marshal Bulganin and Mr. Krushchev, to Britain is believed to have opened a door — if only a small door — to better relations between East and West but a dinner held at the House of Commons to which the Labor Party invited the two distinguished leaders ended up in turmoil and has certainly done harm between the Russian Communists and British socialists.

Meanwhile the British Government has issued a list of the products which Russia would like to buy and has simultaneously pointed out that raw copper, rolled copper and various types of machinery are banned under strategic embargoes. There is no doubt that the U. S. S. R. would like to buy copper in order to equip her new electrical schemes and maybe to put some into a reserve. It would appear that tinplates and galvanized sheets are not on the prohibited list.

U. K. LEAD STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports a decline in stocks of lead at the end of February compared with the end of January. Stocks of Englished refined were 12,849 tons compared with 13,009 tons and imported virgin 16,844 tons (21,227 tons). Of Production of English refined during the month totalled 7,290 tons and consumption (full details of which appear below) totalled 16,465 tons of imported virgin and 6,711 tons of English refined.

	Feb. 1956	Jan.-Feb. 1955	Jan.-Feb. 1956
Cables	9,271	16,537	18,813
Batteries - as metal .	2,442	4,927r	5,040
Battery Oxides	2,533	4,776r	5,167
Tetraethyl Lead	1,794	3,374	3,883
Other Oxides & Compounds	2,296	4,688r	4,374
White Lead	964	1,864	2,051
Shot	411	795	837
Sheet & Pipe	5,888	11,843	11,868
Foil & Collapsible Tubes	434	817	927
Other Rolled & Extruded	628	1,291	1,309
Solder	1,116	2,250	2,147
Alloys	1,260	2,611	2,592
Misc. Uses	1,088	2,261	2,129
TOTAL CONSUMPTION ..	30,125	58,034r	61,137
of which:			
Imported Virgin Lead	16,465	34,118r	32,711
English Refined	6,711	9,985	13,821
Scrap including remelted	6,949	13,931	14,605

r - revised

U. K. TIN STATISTICS

According to reports received from the British Bureau of Non-Ferrous Metal Statistics, stocks of tin in the U. K. decreased during February from 3,236 tons at the end of January to 2,671 tons at the end of February. Imports during the month totalled 129 tons, and consumption (full details of which appear below) totalled 2,082 tons.

	Feb. 1956	Jan.-Feb. 1955	Jan.-Feb. 1956
TINPLATE	972	1,620	1,750
TINNING:			
Copper Wire	45	87	90
Steel Wire	10	18	19
Other	69	138	145
TOTAL	124	243	254
SOLDER	233	351	476
ALLOYS:			
Whitemetal	297	741	584
Bronze & Gunmetal .	251	433	488
Other	33	77	65
TOTAL	581	1,251	1,137
WROUGHT TIN (1)			
Foil & Sheets	35	71	65
Collapsible Tubes ..	29	84	66
Pipes, Wire & Capsules	7	8	9
TOTAL	71	163	140
CHEMICALS (2)	89	187	180
OTHER USES (3) ...	12	23	26
TOTAL ALL TRADES	2,082	3,838	3,963

Notes: (1) Includes compo and "B" metal. (2) Mainly Tin Oxide. (3) Mainly powder. r - revised.

April Tin Market Weak

The tin market in London was weak during April mainly in sympathy with the course of copper values; the fall would possibly have been even heavier but for the fears which are held regarding the outcome of labor disputes in the Malayan mining industry and on Penang dockside.

So far in neither case has a stoppage actually occurred. The threatened dockers' strike would presumably affect the two tin smelters there. One is the new Butterworth plant of the Straits Trading Company. To what extent this Butterworth plant is working is uncertain; it is known that some months ago it had trial runs but the owners are apparently reluctant to report progress. When it does the smelter at Singapore is likely to be relegated to a subsidiary position.

It has been noted with interest in London that the Interim Committee of the International Tin Council has scheduled a meeting for May 8. The view is held that this may prove to be the Committee's final meeting as it is only a preparatory organization and that it will be winding up shortly if Indonesia ratifies the agreement in the near future, as it is expected to do. It is rumored here that the Buffer Stock Manager's staff is being quietly got together in readiness for operations as soon as the agreement comes into force.

Towards the end of April, with stocks in London Metal Exchange official warehouses rising, the "backwardation" temporarily disappeared but it soon reappeared even though stocks increased further during the last week of the month from 1,439 tons to 1,645 tons (April 28th).

Conflicting opinions continue to circulate regarding the future of Malayan tin mining. Pessimists have been gloomily predicting that unless prospecting received Government support the outlook would be bleak but now the Acting Chief Inspector of Mines in the Malayan Federation has forecast a healthy future for the industry since owing to greater efficiency it should be possible to profitably work large areas of low-grade ores which have been hitherto neglected. Also, he added, it must be borne in mind that some two-thirds of Malaya has still to be opened up.

Settlement prices of tin: April 3, £790; April 30, £751.

U. K. Lead Market

During April London lead prices fell by £8 for prompt (current month) and £7 for forward (third following month), so that the backwardation diminished from 30s to 10s a ton. Conditions were rather colorless in the market, with demand in the U. K. and on the Continent of Europe only moderate.

There was a slight decline on bal-

(Continued on page 19)

U. K. ZINC STATISTICS

There was a slight decrease in stocks of zinc in the U. K. at the end of February at 44,288 tons (22,246 tons held by consumers and 354 tons in London Metal Exchange approved warehouses) compared with 45,239 tons at the end of January. Imports during the month totalled 10,307 tons and production was 7,846 tons of virgin. Consumption figures were 21,496 tons of virgin and 482 tons of remelted.

Full consumption details, as reported by the British Bureau of Non-Ferrous Metal Statistics, are given below:

	Feb. 1956	Jan.-Feb. 1955	Jan.-Feb. 1956
Brass	10,185	20,565	20,580
Galvanizing	9,993	17,728	18,927
of which:			
General	2,994	5,750	6,001
Sheet	2,967	5,618	5,514
Wire	2,093	3,730	3,900
Tube	1,939	2,630	3,512
Rolled Zinc	1,843	3,633	3,902
Zinc Oxide	2,613	5,556	6,429
Zinc Diecasting & Forming Alloy	3,217	6,657	6,974
Zinc Dust	710	1,840	1,543
Misc. Uses	1,007	2,027	1,992
TOTAL ALL TRARDES ..	29,568	58,006	59,347
of which:			
Virgin Zinc High Purity 99.99%	3,636	7,222	7,723
Electro & High Grade 99.95%	6,128	11,417	12,479
Prime Western g.o.b. & debased	11,732	24,165	22,617
Remelted Zinc	482	1,014	959
Brass & other Copper Alloy Scrap (zinc content)	4,521	8,302	9,193
Scrap Zinc Metal Alloy Residues etc. (zinc content)	3,069	5,886	6,376

United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 6, 1951, Under Torquay Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

COPPER

NOTE—The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958.

Copper ore and concentrates, usable as flux, etc., copper content	free
Copper ore and concentrates, product of Cuba and Philippines, copper content	free
Copper ore and concentrates, copper content	free
Regulus, black, or coarse copper, and cement copper, copper content	free
Unrefined black, blister, and converter copper in pigs or converter bars, copper content	free
Refined copper in ingots, plates or bars, copper content	free
Copper rolls, rods or sheets	1¼c lb.
Copper seamless tubes and tubing	3½c lb.
Copper plain wire	12½%
Copper brazed tubes	5½c lb.
Old and scrap copper, fit only for remanufacture; and scale and clippings, copper content	free

BRASS

Brass rods, sheets, plates, bars, strips, muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets	2c lb.
Brass tubes and tubing, seamless	2c lb.
Brass tubes, brazed, angles and channels	6c lb.
Brass and bronze wire	12½%

LEAD

NOTE—Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended Feb. 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f., lead content	¾c lb.
Bullion or base bullion, lead content	1 1/16c lb.
Pigs and bars, lead content	1 1/16c lb.
Reclaimed, scrap, dross, lead content	1 1/16c lb.
Babbitt metal and solder, lead content	1 1/16c lb.
Pipe, sheet, shot, glaziers' lead, and wire	1 5/16c lb.
Type metal and antimonial lead, lead content	1 1/16c lb.
White lead	1.05c lb.
Litharge	1¼c lb.
Red lead	15/16c lb.
Orange mineral	1c lb.

ZINC

NOTE—Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended Feb. 12, 1952, and reimposed on July 24, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content	6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content	6/10c lb.
Zinc, old and worn out, fit only for remanufacture	¾c lb.
Dross and skimmings	¾c lb.
Zinc in blocks, pigs, or slabs	7/10c lb.
Zinc in sheets	1c lb.
Zinc sheets, plated with nickel or other base metal, or solutions	1⅛c lb.
Zinc dust	7/10c lb.
Zinc die-casting alloys	12½%
Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry	3/5c lb.
ground in or mixed with oil or water	1c lb.

MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except alloys elsewhere provided for	1½c lb.
Aluminum scrap	free
Aluminum plates, sheets, bars, rods, circles, squares, etc	3c lb.
Antimony ore, antimony content	free
Antimony metal and regulus	2c lb.
Antimony needle or liquidated	¼c lb.
Antimony oxide	1c lb.
Antimony sulphides	½c lb. & 12½%
Arsenic, metallic	3c lb.
Arsenious acid or white arsenic	free
Bauxite, crude*	free
Bauxite, refined	¼c lb.
Bismuth	1¾%
Bismuth salts and compounds	35%
Beryllium metal and compounds	25%
Beryllium ore	free
Cadmium	3¾c lb.
Cadmium flue dust, cadmium content	free
Chrome ore or chromite	free
Cobalt ore and concentrates, cobalt content	free
Chrome or chromium metal	12½%
Cobalt metal	free
Magnesium, metallic	20c lb.
Magnesium scrap	free
Magnesium alloys, powder, sheets, wire	20c lb. & 10%
Manganese ores, containing over 10% manganese, manganese content	¼c lb., except Cuba, free
Molybdenum ore or concentrates, molybdenum content	35c lb.
Nickel ore, matte and oxide	free
Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms	1¼c lb.
Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes	12½%
Nickel tubes, tubing	6¼%
(if cold rolled, drawn or worked—2½% extra)	
Nickel scrap	free
Platinum, ores, platinum content, oz. troy	free
Platinum, grain, nuggets, sponge and scrap, oz. troy	free
Platinum in ingots, bars, sheets, or plates, not less than ⅛ in. thick, oz. troy	free
Quicksilver or mercury	25c lb.
Selenium and salts	free
Tantalum	12½%
Tin ore, cassiterite, and black oxide of tin, tin content	free
Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f.	free
Tungsten ore or concentrates, tungsten content	50c lb.

*Crude bauxite import duty suspended for two years, effective July 16, 1954.

market during an 18-month period

The zinc market tone also has been

WORLD COPPER PRICES DECLINE; DOMESTIC SMELTER ELECTRO AT 45c, 1c UNDER PRODUCERS' QUOTATION

Fabricated Mill Products Reduced; Brass Ingot Cut 1½-2½c Lb.; More Lead and Zinc Offered to Stockpile; Tin Easier; Quicksilver Steady

May 8, 1956

THE main event in the domestic metal market during the month in review was the dramatic downturn in copper prices which saw custom smelter electrolytic selling below the producers' level for the first time in about two years. Primary producers maintained their quotation at 46.00c a pound, delivered, but smelters were at least 1.00c a pound less. World market copper prices also dipped, with Katanga electro at 44.00c a pound, f.a.s. New York. The cash bid price for copper on the London Metal Exchange closed at the equivalent of 43.50c a pound on May 8; as of April 30, the Rhodesian Selection Trust reduced its fixed price for British consumer to the equivalent of 43.75c a pound.

Leading domestic brass mills reduced their prices, effective May 9, to reflect a copper price of 46.00c. Earlier, brass and bronze ingot makers, reflecting cheaper scrap copper plus a lack of consuming demand, cut their ingot prices 1.50c to 2.50c, effective April 30.

Anaconda Sales Co., effective April 30, announced the price of its Chilean copper sold in the U. S. market would be either the LME average or Anaconda's domestic price, whichever is higher. Effective the week beginning May 7, Kennecott began selling Chilean fire refined copper in the U. S. at the same price at which it sells its own fire refined.

Lead and zinc prices were unchanged, at 16.00c a pound New York 13.50c for the Prime Western grade, East St. Louis, respectively. Tin prices were easier. Quicksilver was fairly steady, as was silver. Primary aluminum was firm but secondary aluminum continued to weaken.

Smelter Electro Plummets

The price of custom smelter electrolytic copper, during the month of April, plummeted 5.50c a pound, from a high of 51.00c to a low of 45.50c. The 90-year high of 54.50c was registered only in mid-March. On May 2, the price slid off again, to 45.00c a pound. Consumers who had hesitated to pay 45.00c a pound for smelter metal only a week or so ago, began taking as much copper as they were offered at 45.00c. With LME prices showing some signs of perking up, however, smelters were not as anxious to dispose of large tonnages for June shipment. The demand for copper from the large domestic producers was still in excess of supply, even though producers maintained their price at 46.00c.

LME copper prices also slumped during April. On April 3, first business day of the month, LME cash bid copper closed the equivalent of 49.69c a pound; on April 30, it was 42.75c. Some recovery was made in early May, on the 8th cash bid was equivalent to 43.50c.

The trends on the LME generally were accompanied by reductions or advances in domestic smelters' scrap copper buying prices. No. 2 scrap copper on May 8 was purchased by smelters at 35.50 to 36.00c a pound; at the beginning of April smelters had paid 42.50c, and 35.50c on April 30. The scrap smelters paid 35.00c a pound for will not be ready for marketing much before August and the refined metal will cost about 40.50c a pound; but there is no telling now what the electro price will be in August.

Brass Mill Products Down

Brass mills finally took action to reflect the lower prices for electro copper. Effective May 9, all major fabricators marked down their prices for copper items 1.50c a pound and the alloy grades proportionately. This brought these companies' prices of fabricated products back to the level which prevailed prior to April 6; the new prices reflect a copper price of 46.00c. The fabricators similarly reduced their brass mill scrap buying prices.

Chilean Copper Sales

Anaconda, as of April 30, is now selling its Chilean copper in the U. S. market at etiher the LME average or Anaconda's domestic price, whichever is higher. Effective the week beginning May 7, Kennecott again began selling its Chilean fire refined copper in the U. S. on the same basis that was in effect prior to the March 28 price arrangement. In effect, Kennecott is selling the Chilean fire refined in the U. S. at the same price as it does its domestic fire refined, disregarding the LME quotation.

Copper Labor Contracts

Labor negotiations, that involve nearly all the big copper mining companies, were getting under way in the copper mining and processing industries on contracts which expire June 30.

Deferred Stockpile Copper

The Office of Defense Mobilization has authorized the General Services Administration to negotiate with those who had contracts with the Government, for them to deliver to the Government the 40,000 tons of copper which had been deferred in an effort to alleviate the shortage. The deliveries to the Government are to begin in mid-1956 according to the following schedule: 7,600 tons in the third quarter; 11,200 tons in the fourth quarter, and in 1957 — 9,800 tons in the first quarter; 6,200 tons in the second quarter; 2,300 tons in the third quarter, and 1,900 tons in the fourth quarter.

The ODM has ordered that the returns to the Government are to be worked out in a manner that will prevent any windfalls to the contractors who owe the copper to the Government. The order further stated that there are to be no further deferments of copper that is destined for the stockpile.

Stockpile Order Reactions

There were different reactions to the ODM order for the return of the 40,000 tons. The order partly attributed to the bullish effect on the London market while domestic copper circles saw nothing bullish in the situation. Those taking the latter viewpoint pointed out that on March 12, 1956, the Commerce Department let it be known that by December 31, 1956, all the copper that had been diverted from the stockpile was to be returned to the Government. London appeared to take the viewpoint, however, that 40,000 tons will be taken out of the

LATE NEWS, PRICE CHANGES

Copper: London trade circles evidently reevaluated the ODM order for the return of 40,000 tons of copper to the U. S. Government's stockpile; cash bid prices on the LME declined £4 on May 14 and were down another £8 at the first call on May 15 to £343 a long ton, equivalent to 42.875c a pound. Domestic smelters on May 15 offered 35.00c a pound for No. 2 heavy copper and wire scrap, off 1.00c.

Tin: Spot Straits tin was quoted at 97.25c a pound New York on May 14; prompt metal was 97.00c.

Platinum: Refiners boosted their platinum price $6 on May 14 to a range of $103-$105 an ounce; with dealers maintaining their $110 level the market price is $103-$110.

Titanium: Titanium Metals Corp. of America reduced its titanium sponge metal price 20.00c, effective May 15, to $3.25 a pound, and the price of all mill products — sheet, strip, billet, bar, extrusions and wire — about 6 per cent, with these reductions ranging from 65.00c to $1 per pound.

Atimony: The ODM on May 14, issued a revised directive covering procurement by the General Services Administration of stockpile materials for the current fiscal year; the directive suspended further procurement of foreign antimony and fluorspar until the GSA has determined the possibility of acquiring additional quantities domestically.

market during an 18-month period beginning with July and will therefore make that much less available to the consuming industry.

In addition to the 40,000 tons that are scheduled to be returned to the Government, an additional 16,000 tons will still be owed to the stockpile and the delivery of this tonnage, it is believed, will be spread over monthly up to March 31, 1959.

Lead, Zinc Stockpiling

The General Services Administration is believed to have taken up all the lead and zinc it was offered for the stockpile when the Government buying agency entered the market for both metals in April. Offers made by domestic producers, it was indicated, were substantially higher than those made in recent months.

The long-term objective of the stockpile is 200,000 tons of lead; it is believed there is still some 45,000 tons of the metal to be purchased by the Government. The long-term buying goal for zinc is 300,000 tons, and it is believed some 80,000 tons of the metal is still to be acquired by the Government over the last half of this year.

Lead Demand Light

Present demand for lead has been light, but with the Government willing to take substantial tonnages off the market each month, there is every assurance that the current 16.00c a pound New York price will hold, unless a sharp break occurs on the London market.

The zinc market tone also has been quiet, with moderate tonnages sold on the basis of 13.50c a pound for the Prime Western grade, East St. Louis. A strike of 2,150 union workers of the New Jersey Zinc Co., which began May 1, so far has had little effect on the zinc market. Negotiations are under way to settle the strike. The two New Jersey Zinc plants, at Palmerton, Pa., and Depue, Ill., which have been closed by the strike, account for about 9,000 to 10,000 tons of zinc a month, eqquivalent to around 10 per cent of the U. S. slab zinc production.

April Zinc Statistics

Domestic shipments of slab zinc in April ran below production with the result that stocks in the hands of producers increased. April output of all grades of slab zinc came to 88,664 tons as against 91,690 tons in March. Shipments of all grades to consumers, for export and to the Government totaled 80,795 tons in April, as compared with 91,485 tons in the preceding month. Of the April shipments, consumers took 74,788 tons, 9,416 tons less than in March. At the end of April stocks in the hands of producers amounted to 47,907 tons as against 40,038 tons in March.

Tin Prices Easier

Spot Straits tin at New York was quoted at 97.375c a pound on May 8 as against the last previously quoted price in this space of 99.25c as of April 17. For the April 17-May 8 period, the high was the 99.25c of April 17 and the low, the 97.375c of May 8.

Production of tin at the Government-owned smelter at Texas City, Texas, came to 1,803 long tons of 3-Star grade in April, virtually unchanged from the 1,802 tons turned out in March. Output in April a year ago, however, was 2,353 tons.

Silver Lower

Silver at New York was quoted at 90.75c an ounce, as of April 19, down 0.25c from the 91.00c level established on April 9. Only one single price change was registered during the month in review, a considerable difference from the two previous months, February and March, when prices moved up and down several times.

Quicksilver Steady

Spot quicksilver of European and domestic origin was fairly steady. On April 10 the spot price moved up to a range of $268 to $270, and on April 18 the high side of the range was increased another $1, to $271. The spot supply has been on the tight side, with recent arrivals generally moving directly to consumers.

Secondary Aluminum Weaker

Secondary aluminum continued to weaken with smelters reducing their alloy quotations in an effort to attract business. Primary aluminum continued firm, on the basis of 25.90c a pound (f.o.b.) for the 30-pound 99 per cent plus primary ingot.

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Daily Metal Quotations in April, 1956

The following quotations are taken from the Daily Metal Reporter

(In Cents Per Pound)

APRIL	Copper				Tin — Straits New York		Lead		Zinc					Aluminum	Antimony	Silver
	Producers' Price Del. Conn.	Custom Smelters' or Outside Price	Electro f. o. b. Refinery	Lake Del.	Spot	Prompt	New York	Outside St. Louis	Prime West. f. o. b. E. St. Louis	Prime West. Del. N. Y.	Brass Spec. f. o. b. E. St. Louis	High Grade Delivered	Spec. High Grade Delivered	Virgin 99%	Domestic Spot 99.5% f.o.b. Laredo	(Cents Per Ounce) New York
2	46.00	50.75	45.70	46.00	100.375	100.25	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.25
3	46.00	50.75	45.70	46.00	100.50	100.50	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
4	46.00	51.00	45.70	46.00	99.75	99.75	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
5	46.00	51.00	45.70	46.00	99.875	99.875	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
6	46.00	51.00	45.70	46.00	99.75	99.75	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.875
7	46.00	51.00	45.70	46.00	....	....	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	....
9	46.00	51.00	45.70	46.00	99.50	99.50	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
10	46.00	51.00	45.70	46.00	99.125	99.125	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
11	46.00	50.00	45.70	46.00	99.25	99.25	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
12	46.00	50.00	45.70	46.00	99.25	99.25	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
13	46.00	50.00	45.70	46.00	99.50	99.50	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
14	46.00	50.00	45.70	46.00	....	....	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	....
16	46.00	49.25	45.70	46.00	99.375	99.375	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
17	46.00	48.75	45.70	46.00	99.25	99.25	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
18	46.00	48.00	45.70	46.00	98.75	98.75	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	91.00
19	46.00	48.00	45.70	46.00	98.875	98.75	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
20	46.00	47.50	45.70	46.00	98.75	98.625	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
21	46.00	47.50	45.70	46.00	....	....	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	....
23	46.00	47.50	45.70	46.00	99.00	98.875	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
24	46.00	47.50	45.70	46.00	98.75	98.625	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
25	46.00	47.50	45.70	46.00	98.75	98.50	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
26	46.00	46.00	45.70	46.00	98.75	98.50	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
27	46.00	45.75	45.70	46.00	99.125	98.75	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
28	46.00	45.75	45.70	46.00	....	....	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	....
30	46.00	45.50	45.70	46.00	98.375	98.00	16.00	15.80	13.50	14.00	13.75	14.85	15.25	25.90	33.00	90.75
AV.	**46.00**	**48.88**	**45.70**	**46.00**	**99.268**	**99.145**	**16.00**	**15.80**	**13.50**	**14.00**	**13.75**	**14.85**	**15.25**	**25.90**	**33.00**	**90.875**
HI.	**46.00**	**51.00**	**45.70**	**46.00**	**100.50**	**100.50**	**16.00**	**15.80**	**13.50**	**14.00**	**13.75**	**14.85**	**15.25**	**25.90**	**33.00**	**91.25**
LO.	**46.00**	**45.50**	**45.70**	**46.00**	**98.375**	**98.00**	**16.00**	**15.80**	**13.50**	**14.00**	**13.75**	**14.85**	**15.25**	**25.90**	**33.00**	**90.75**

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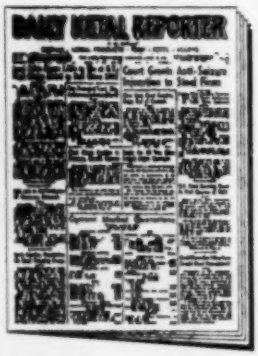

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Domestic Zinc Mine Production Curtailed By Rise in Imports

(Continued from page 10)

and as a chemical. These uses have increased in total over the last five-year period to an average of about 46,000 tons a year and in 1955 ran some 52,000 tons — a substantial increase from the 28,000 tons consumed in the base period.

For many years zinc plates have been used to control corrosion of ship hulls, boilers, and miscellaneous vessels and structures. In more recent years the expansion of pipeline facilities has brought about a growing awareness of the damage from corrosion with a resultant revived interest in cathodic protection.

Studies by corrosion engineers and those sponsored by the American Zinc Institute have indicated a potential requirement for zinc anodes for cathodic protection not only of pipelines but of steel structures. How large this requirement may become is rather difficult to estimate but it is hoped that within the next few years the present initial small tonnage requirement of zinc anodes for the protection of pipelines and structures will show encouraging growth.

Table I summarizes the slab zinc requirement of the several industries I have discussed for each of the years 1946-1955 compared to the yearly average consumption of the base period; it also shows the yearly average of each of the five-year periods from 1931 through 1955.

The stockpiling program, as inaugurated by the Government in 1954 in place of relief to the domestic zinc mining industry under the Escape Clause of The Tarif Act, apparently has not accomplished the maintenance of an adequate industry mobilization base. Of the 300,000 tons authorized for purchase about 100,000 tons were purchased in 1954 and 90,000 tons in 1955, leaving an estimated unpurchased balance, as of January 1, 1956, of about 100,000 tons.

Taking into consideration Government purchases in 1954 and 1955 which provided relief from the heavy accumulation in smelter stocks, and the fact that domestic consumption was at an all time high, it might have been expected that the domestic zinc mining industry would have made more of a recovery from the low production to which it had been forced by heavy imports in 1953 and 1954; but this was not the case for imports of zinc of foreign origin were available in tonnage second only to 1953 and sufficient to meet the increased consumption requirement.

As has been demonstrated in the past in the zinc industry and is being demonstrated today in the copper industry, at times markets abroad are more attractive to foreign producers than is the United States market, with a resultant detriment to domestic consumers.

Since the base period zinc consumption has shown a steady growth. To continue and increase this growth against competitive or substitute materials, the American Zinc Institute has broadened its promotional programs which include zinc die castings, metallic zinc coatings, cathodic protection, zinc oxide and a research program on the finishing of zinc die castings.

U. S. Mining Industry Needs Lead and Zinc Import Tax

(Continued from page 8)

shutdown casualties. Financial commitments for the future are an accurate test of the earning position of lead-zinc on company books and by that measure the claim is substantiated that the major portion of domestic lead-zinc production lacks long range incentive, even with the present application of palliatives.

Andrew Fletcher made a speech in Denver last February on the subject of: "Why Maintenance of Domestic Mining is in the Best Interests of the United States, Metal Consumers and Producers." His opening statement is most appropriate:

". . . . two years ago, we were all greatly concerned with finding a solution to the immediate problems of the domestic mining industry, and the lead-zinc branch of it in particular. Although an emergency solution was later reached in the form of the current stockpiling program, I hope none of you believes the problems of domestic mining have all been solved. Actually they have only been concealed temporarily, not eliminated, and their resolution for better or worse should not much longer be postponed."

Conclusion

You present here today and others who may note these remarks on domestic mining of lead and zinc may or may not agree with some of the conclusions drawn from the review of events and statistical data. However, it is clear, I believe, that measures taken to relieve the industry from some of its distress, to increase domestic production and to provide "an adequate mobilization base" have not been effective to the degree expected by those who provided the relief measures.

The principal measure of relief — stockpiling — is nearing fulfillment to the quantities stipulated, and the principal contributing cause, excessive imports, continues at a high level. There is little reason for any of the interested parties, i.e., producers, consumers or public (Government), being satisfied with results of the past two years' program or with the present situation.

The mine operators are as interested as other affected parties in obtaining a sound, constructive program. They strongly urge consideration of an import tax, the application of which would be related to lead-zinc prices consistent with production costs in our own domestic economy. The tax would only apply when domestic prices were forced below that level.

I will not attempt to discuss in detail the effects of such a provision on miners, consumers, and the public. Mr. Fletcher's paper, previously referred to, presents those matters in logical detail and I heartily recommend that all of you read it, whatever your phase of interest might be.

We are all interested parties, and therefore judges in the pending decision regarding lead-zinc mining. Only by your full attention and help can an equitable and workable solution be reached.

British Metal Markets

(Continued from page 13)

ance in London zinc quotations in April while the backwardation fell by ten shillings from 37s 6d to 27s 6d a ton. Consuming demand was dull; the galvanizers are not as busy as they would wish while other consumer trades, such as the brass makers, are not over active. The motor car industry here is running into a difficult period.

Russian high grade zinc is reported to have been offered at only a £7 premium recently, which is less than that commanded by best Empire grades.

It is interesting to note that the new electrolytic zinc refinery of the Bleiberg concern in Austria is working at full capacity (about 10,500 metric tons annually) thanks to an order for high grade zinc received from Panama.

Even Egypt now wants to join the ranks of metal producers and has a plan to build a zinc works and also an aluminum plant, using machinery from Eastern Germany. There are, so far, no details of the aluminum works but the initial annual capacity of the zinc smelter, to be based on domestic ore said to assay between 20 and 25 per cent Zn, is planned at 6,000 tons.

Washington Report

(Continued from page 5)

chases of mercury be raised from $225 per flask to $250. Passage of S. 3379, to aid domestic tungsten producers, also was urged. Passage of S. 3504, it was stated, could ultimately make the U. S. self-sufficient in chromite if the Government rendered aid to the industry.

Award Zirconium Contracts

National Distillers Products Corp., National Research Corp. and Carborundum Co. have received contracts from the Atomic Energy Commission for supplying a total of 11,000,000 pounds of zirconium to be delivered over five years at a cost of about $75,000,000. National Distillers will supply 1,000,000 pounds annually, National Research 700,000 pounds annually, and Carborundum 500,000 pounds annually.

National Research reported its price on zirconium will be $6.50 a pound or $22,750,000 over the five-year period. Prior to the new procurement, the last price on reactor-grade zirconium was $14 a pound. All three companies will build new plants to handle their AEC contracts.

Copper Statistics Reported by Copper Institute

Combined Totals in U. S. A. and Outside U. S. A.

(In tons of 2,000 pounds)

	Crude Production		Refined	Deliveries to	Refined Stock	Stock Increases or Decreases		
	Primary	Secondary	Production	Customers	End of Period	Blister	Refined	Total
1955								
Feb.	203,338	13,472	212,823	225,255	188,916	+ 3,987	—16,362	—12,375
Mar.	231,701	10,558	237,526	235,118	195,064	+ 4,733	+ 6,148	+10,881
Apr.	231,236	10,842	224,525	221,415	200,835	+17,553	+ 5,771	+23,324
May	229,774	12,305	251,791	233,645	219,960	— 9,712	+19,125	+ 9,413
June	232,058	11,898	240,499	248,449	209,945	+ 3,416	—10,015	— 6,599
July	167,746	8,379	159,499	149,643	219,643	+16,626	+ 9,698	+26,324
Aug.	195,394	10,138	208,974	200,049	230,022	— 3,441	+10,379	+ 6,938
Sept.	236,949	13,788	248,481	262,118	228,002	+ 2,256	— 2,020	+ 236
Oct.	245,462	11,439	244,255	246,898	227,261	+12,646	— 741	+11,905
Nov.	229,736	9,304	239,963	248,827	218,519	— 1,283	— 8,819	—10,025
Dec.	214,114	11,713	250,349	247,222	221,231	—24,522	+ 1,643	—21,719
1955 Total	2,613,662	133,065	2,728,309	2,744,391	221,331	+18,418	— 8,552	+11,112
1956								
Jan.	233,897	11,250	237,300	242,425	217,315	+ 7,847	— 4,016	+ 3,831
Feb.	228,409	11,355	243,458	236,841	226,686	— 193	+ 9,371	+ 9,178
Mar.	243,676	14,293	258,462	261,814	225,827	— 493	— 859	— 1,352
Apr.	233,577	14,521	254,462	242,244	238,125	— 6,364	+12,298	+ 5,934

In U. S. A.

1955								
Feb.	89,078	13,246	123,162	108,503	44,579	.....	— 1,403	.....
Mar.	98,171	10,239	135,701	131,354	46,091	.....	+ 1,512	.....
April	93,669	10,599	122,129	120,205	42,759	.....	+ 3,332	.....
May	95,042	11,731	135,042	125,169	43,340	.....	+ 581	.....
June	90,645	11,295	130,881	133,739	38,533	.....	— 4,807	.....
July	31,346	7,614	51,182	60,143	36,293	.....	— 2,240	.....
Aug.	67,990	9,364	98,732	90,516	49,350	.....	+13,057	.....
Sept.	96,343	12,739	139,880	145,590	53,625	.....	+ 4,275	.....
Oct.	99,514	10,279	127,865	134,844	49,738	.....	— 3,887	.....
Nov.	94,287	7,888	133,711	142,830	48,736	.....	— 1,002	.....
Dec.	93,186	10,912	145,423	139,512	61,554	.....	+12,818	.....
1955 Total	1,036,702	124,760	1,467,448	1,446,354	61,554	.....	+14,446	.....
1956								
Jan.	96,732	10,353	123,917	130,431	50,016	.....	—11,538	.....
Feb.	89,326	11,697	127,917	139,383	47,053	.....	— 2,963	.....
Mar.	99,681	12,596	144,027	141,590	51,595	.....	+ 4,542	.....
Apr.	95,400	13,585	140,032	139,927	54,887	.....	+ 3,292	.....

Outside U. S. A.*

1955								
Feb.	114,260	208	89,661	116,752	144,337	.....	—14,959	.....
Mar.	133,530	319	101,825	103,764	148,973	.....	+ 4,636	.....
April	137,567	283	102,396	101,210	158,076	.....	+ 9,103	.....
May	134,732	574	116,749	108,476	176,620	.....	+18,544	.....
June	141,413	603	108,317	114,710	171,412	.....	— 5,208	.....
July	135,900	765	109,659	89,500	183,350	.....	+11,938	.....
Aug.	127,405	774	110,242	109,533	180,672	.....	— 2,678	.....
Sept.	140,606	1,049	108,601	116,528	174,377	.....	— 6,295	.....
Oct.	145,948	1,160	116,490	112,054	177,523	.....	+ 3,146	.....
Nov.	135,089	1,419	107,097	105,997	169,783	.....	— 7,740	.....
Dec.	120,928	801	104,926	107,710	159,777	.....	—10,006	.....
1955 Total	1,576,960	8,305	1,260,861	1,298,037	159,777	.....	—21,752	.....
1956								
Jan.	137,165	897	113,502	111,994	167,299	.....	+ 7,522	.....
Feb.	138,918	1,808	115,541	97,458	179,633	.....	+12,334	.....
Mar.	143,995	1,697	114,435	120,224	174,232	.....	— 5,401	.....
Apr.	138,177	936	114,430	102,317	183,238	.....	+ 9,006	.....

*Excluding Russia, Yugoslavia, Norway, Sweden, Japan, Australia.

Electrolytic Copper

Producers' Price, Del. Valley

Monthly Average Prices

(Cents Per Pound)

	1953	1954	1955	1956
Jan.	24.50	29.88	30.24	43.00
Feb.	25.46	29.88	33.00	44.03
Mar.	31.49	29.93	33.222	46.00
Apr.	30.59	29.98	36.00	46.00
May	29.72	30.00	36.00	....
June	29.94	30.00	36.00	....
July	29.92	30.00	36.00	....
Aug.	29.69	30.00	37.81	....
Sept.	29.75	30.00	43.00	....
Oct.	29.80	30.00	43.00	....
Nov.	29.88	30.00	43.00	....
Dec.	29.88	30.00	43.00	....
Aver.	29.15	29.27	37.522	....

Electrolytic Copper

Custom Smelters' Price, Del Valley

(Cents Per Pound)

	Custom Smelters' Price, Del. Valley			
	1953	1954	1955	1956
Jan.	24.50	29.75	30.48	50.22
Feb.	25.804	29.75	33.00	52.07
Mar.	33.269	29.866	33.667	53.11
Apr.	31.18	29.965	36.00	48.88
May	29.785	30.00	36.00	....
June	29.875	30.00	36.00	....
July	29.846	30.00	36.00	....
Aug.	29.375	30.00	40.14	....
Sept.	29.50	30.00	50.00	....
Oct.	29.606	30.00	45.99	....
Nov.	29.75	30.00	45.84	....
Dec.	29.75	30.00	49.42	....
Aver.	29.35	29.944	39.38	....

Lake Copper

Producers' Price, Delivered

Monthly Average Prices

(Cents Per Pound)

	1953	1954	1955	1956
Jan.	24.625	30.00	30.12	43.00
Feb.	24.625	30.00	33.00	43.783
Mar.	32.00	30.00	33.56	46.00
Apr.	32.23	30.00	36.00	46.00
May	Nom.	30.00	36.00	....
June	30.125	30.00	36.00	....
July	30.125	30.00	36.00	....
Aug.	30.125	30.00	37.46	....
Sept.	30.125	30.00	43.00	....
Oct.	30.125	30.00	43.00	....
Nov.	30.125	30.00	43.00	....
Dec.	30.038	30.00	43.00	....
Aver.	29.47	30.00	37.51	....

Fabricators' Copper Statistics

(In tons of 2,000 pounds)

	Fabricators' Stocks of Refined Cop.	Unfilled Purchases of Refined by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consmd. by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1950						
Total	290,241	92,372	288,392	313,052	1,438,327	—218,831
1951						
Total	280,402	32,147	295,385	303,050	1,392,111	—285,886
1952						
Total	333,455	32,652	292,157	275,312	1,389,451	—201,362
1953						
Oct.	352,091	31,035	305,431	187,438	116,259	—109,743
Nov.	350,804	34,380	305,877	165,047	102,258	— 85,740
Dec.	380,881	25,022	309,664	170,917	83,652	— 74,678
Total	.....	.....	.....	.....	1,375,869	.....
1954						
Jan.	355,632	26,423	307,014	142,588	100,805	— 67,547
Feb.	349,661	26,227	305,670	122,999	94,975	— 52,781
Mar.	341,693	28,836	304,065	123,887	103,796	— 57,423
Apr	341,616	30,677	302,391	124,559	104,943	— 54,667
May	349,796	33,210	305,504	123,039	102,810	— 45,537
June	351,518	43,723	304,833	122,218	104,531	— 31,810
July	370,287	41,104	307,352	130,576	80,751	— 26,537
Aug.	359,474	58,007	302,423	131,514	102,966	— 16,456
Sept.	341,726	50,650	300,603	148,515	106,628	— 56,742
Oct.	330,787	50,240	299,068	135,140	116,232	— 53,181
Nov.	335,315	55,517	301,097	137,076	114,392	— 47,341
Dec.	360,526	58,125	304,619	136,581	99,479	— 22,549
Total	.....	.....	.....	.....	1,232,090	.....
1955						
Jan.	334,105	66,122	302,658	159,016	136,539	— 61,447
Feb.	323,425	75,840	301,597	180,898	118,786	— 83,230
Mar.	311,235	85,859	301,937	187,827	143,544	— 92,670
Apr.	316,575	88,992	304.117	205,308	115,073	—103,858
May	327,343	111,715	309,219	323,279	113,485	—102,440
June	327,696	126,703	309,972	234,578	132,377	— 90,151
July	312,587	165,505	301,048	286,095	75,846	—109,051
Aug.	304,097	150,854	303,089	283,653	97,688	—131,791
Sept.	334,996	133,391	314,111	270,102	113,628	—115,826
Oct.	353,469	135,075	313,048	275,255	115,453	— 99,759
Nov.	373,314	139,855	313,779	283,953	122,332	— 84,563
Dec.	389,974	139,094	314,145	293,264	127,006	— 78,341
Total	.....	.....	.....	.....	1,412,287	.....
1956						
Jan.	376,753	143,815	312,128	305,942	138,711	— 97,502
Feb.	388,823	135,637	319,279	282,314	130,923	— 77,133
Mar.	392,143	140,348	319,056	291,465	135,746	— 78,030

Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Jan.	7,080	10,172	17,084	15,763	6,640	4,528	6,486	9,859	11,047	14,322
Feb.	5,394	11,890	20,238	12,500	5,153	3,638	10,337	8,490	15,198	14,497
Mar.	9,187	11,954	20,678	13,538	7,912	5,243	19,991	9,738	12,198	15,921
Apr.	13,065	15,125	15,968	12,304	8,553	6,214	16,584	9,004	13,162	17,233
May	14,264	16,357	14,227	8,749	8,458	8,033	10,857	8,587	16,133	.....
June	9,883	11,178	8,809	20,823	8,628	4,425	10,945	13,209	14,765	.....
July	8,578	8,370	7,782	10,040	6,642	5,188	9,063	10,260	9,988	.....
Aug.	8,572	17,081	8,246	10,452	6,113	5,003	7,137	10,100	12,197	.....
Sept. ...	10,611	16,001	10,980	4,903	3,561	4,667	9,042	10,641	15,037	.....
Oct.	8,532	10,854	6,401	9,459	3,336	4,602	10,065	11,632	12,897	.....
Nov.	8,070	7,625	15,347	9,237	3,179	4,724	7,815	10,979	9,965	.....
Dec.	9,154	11,826	10,538	7,178	4,538	6,208	11,476	14,876	13,180	.....
Total ...	112,386	147,931	156,303	142,067	71,812	62,970	129,798	127,449	154,714	.....

*As compiled by Copper Institute.

Brass and Bronze Ingot Monthly Shipments

(Net Tons)

The following figures showing the combined shipments of ingot brass and bronze are compiled by the Ingot Brass and Bronze Industry and represent in excess of 95 per cent of the deliveries of the entire industry.

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Jan.	29,196	27,841	26,998	19,456	18,874	28,416	23,315	24,423	20,661	25,201	27,726
Feb.	24,580	24,686	22,487	15,026	18,487	27,168	24,211	25,429	19,920	25,849	24,949
Mar.	27,176	17,477	24,282	14,550	22,494	31,997	23,890	28,256	23,653	29,713	28,310
Apr.	30,228	24,577	25,177	10,695	22,118	30,472	22,547	25,044	24,748	27,641	.....
May	27,333	19,525	23,716	11,114	23,643	33,267	21,740	21,660	22,269	23,708	.....
June	31,349	16,929	24,401	9,696	25,093	33,817	21,274	20,818	22,348	22,141	.....
July	26,677	16,728	20,456	10,220	21,609	32,016	18,947	19,821	17,074	18,513	.....
Aug.	27,896	18,589	24,098	14,194	26,689	25,285	21,807	20,156	21,684	27,018	.....
Sept.	27,290	19,025	23,641	16,208	28,811	22,285	22,770	21,463	22,464	26,849	.....
Oct.	31,461	22,806	21,559	18,026	32,240	23,124	25,811	22,280	24,080	25,228	.....
Nov.	29,282	21,666	21,731	18,488	31,748	25,544	23,441	21,840	23,061	25,102	.....
Dec.	27,206	23,962	20,954	17,960	28,576	20,987	22,958	20,541	21,274	21,448	.....
Total ...	339,724	263,711	279,509	175,642	308,563	332,978	277,756	271,251	263,233	298,406	.....
Aver. ...	28,310	21,976	23,292	14,637	25,297	27,615	23,145	22,604	21,936	24,867	.....

Mine Production of Copper in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern	Missouri	Western	Total
1953				
Ttl.	38,900	2,374	885,174	926,448
1954				
Aug.	2,947	155	48,566	51,668
Sept.	3,427	157	58,527	62,111
Oct.	3,683	150	67,382	71,215
Nov.	3,660	136	75,412	79,208
Dec.	4,156	137	77,124	81,417
Ttl.	40,302	1,925	798,241	835,472
1955				
Jan.	5,054	175	78,071	83,300
Feb.	5,339	185	77,968	83,492
Mar.	6,655	220	86,894	93,769
Apr.	5,644	190	83,320	89,154
May	4,606	199	86,019	90,824
June	5,192	189	84,011	89,392
July	4,678	169	28,496	33,343
Aug.	5,028	125	62,082	67,235
Sept.	6,928	130	83,213	90,271
Oct.	6,552	195	85,445	92,192
Nov.	6,188	184	84,681	91,053
Dec.	6,756	179	81,638	88,575
Ttl.	68,622	2,140	921,838	992,600
1956				
Jan.	6,674	163	87,682	94,519
Feb.	6,688	164	82,560	89,412

Average Custom Smelters' Scrap Buying Prices

(Cents per pound for carload lots del. consumers' works)

	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Refinery Brass*
1954				
Av.	26.75	25.22	23.69	22.92
1955				
Mar.	34.28	32.78	31.03	29.43
Apr.	34.48	32.98	31.23	30.61
May	33.70	32.20	30.45	30.00
June	35.57	34.07	32.32	31.61
July	37.39	35.89	34.04	33.06
Aug.	39.93	38.43	36.40	34.24
Sept.	43.88	42.38	40.00	38.21
Oct.	39.48	37.98	36.69	35.83
Nov	40.08	38.58	36.33	36.34
Dec.	42.75	41.25	38.79	38.71
Av.	37.035	35.535	33.59	32.70
1956				
Jan.	42.39	40.89	38.42	38.26
Feb.	43.35	41.85	39.35	38.65
Mar.	45.77	44.27	41.77	41.02
Apr.	41.65	40.15	37.65	38.15

*Of dry content for material having a dry copper content in excess of 60%.

Brass Ingot Makers' Scrap Copper Buying Prices

(Average Prices)

(Cents per pound del. refinery for 60,000 lbs. of each grade)

	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Composition	Heavy Yellow Brass
1954				
Av.	26.59	25.07	20.99	16.24
1955				
Mar.	33.66	31.83	27.44	21.43
Apr.	33.73	31.99	27.90	21.38
May	33.66	32.16	27.08	24.18
June	34.79	33.29	27.77	20.63
July	36.83	35.33	30.15	22.535
Aug.	39.74	38.24	32.67	23.76
Sept.	43.88	42.38	35.01	24.96
Oct.	39.468	37.968	32.22	22.80
Nov.	40.08	38.58	33.15	22.53
Dec.	43.58	41.22	34.84	24.22
Av.	36.63	35.02	29.905	22.35
1956				
Jan.	42.39	40.89	35.22	24.51
Feb.	43.35	41.85	34.72	24.79
Mar.	45.77	44.27	36.46	27.76
Apr.	41.65	40.15	34.40	24.49

United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1952	25,339	532,778	558,117	43,560	492,091
1953	43,560	533,883	577,443	81,152	488,437
1954					
March	97,981	50,808	148,789	100,927	47,837
April	100,927	46,730	147,657	100,441	47,161
May	100,441	49,139	149,580	109,302	40,183
June	109,302	42,317	151,619	104,626	46,987
July	104,626	35,716	140,342	93,030	37,402
August	93,030	44,089	137,119	84,429	43,402
September	84,429	47,762	132,191	93,358	30,891
October	93,358	51,276	144,634	95,496	36,307
November	95,496	46,711	142,207	94,387	34,913
December	94.387	46,506	140,893	92,719	37,017
Total	.....	551,618	632,770	.....	475,551
1955					
January	92,719	44,780	137,499	84,882	40,451
February	84,882	40,173	125,055	64,938	46,645
March	64,938	50,308	115,246	59,881	42,381
April	59,881	50,274	110,155	54,956	44,878
May	54,956	45,435	100,391	50,947	46,130
June	50,947	48,150	99,097	44,665	44,985
July	44,665	23,850	68,515	39,856	26,547
August	39,856	36,912	76,768	34,111	41,469
September	34,111	50,453	84,564	30,753	46,250
October	30,753	53,747	84,500	29,913	52,062
November	29,913	52,623	82,536	28,855	51,370
December	28,855	50,448	79,303	31,089	48,171
Total	.....	547,153	639,872	.....	531,339
1956					
January	31,089	51,306	82,395	32,469	49,746
February	32,469	49,475	81,944	41,450	39,411
March	41,450	54,174	95,624	52,089	39,344

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Cable	Amm.	Foil	Batt'y	Brass Making	Sundries	Jobbers	Unclassified
1950	66,646	28,854	3,304	93,297	6,374	60,118	10,450	230,594
1951	70,149	32,099	2,063	75,337	5,583	48,248	3,550	259,155
1952	74,616	30,809	1,374	77,238	5,160	50,943	5,671	246,283
1953								
Nov.	6,920	3,352	312	4,452	385	4,876	982	21,955
Dec.	6,220	1,896	72	3,985	206	3,350	402	18,876
Total	76,283	34,415	2,136	80,339	5,716	55,936	6,390	227,222
1954								
Jan.	6,273	2,955	....	5,077	964	5,051	628	16,160
Feb.	6,040	2,170	....	5,890	798	3,682	254	17,717
Mar.	7,620	2,405	252	6,663	149	6,818	492	23,438
Apr.	6,207	2,550	361	6,341	308	5,194	342	25,798
May	6,030	2,310	276	5,635	250	4,621	1,020	20,041
June	6,116	3,700	122	5,711	406	6,525	1,114	23,293
July	4,000	1,500	...	6,690	415	4,121	861	19,608
Aug.	8,799	3,358	146	6,111	838	5,377	1,152	17,621
Sept.	4,602	1,653	564	4,110	20	4,667	851	14,424
Oct.	6,142	1,970	657	4,172	383	4,581	829	17,573
Nov.	5,816	3,795	333	3,898	520	3,202	721	16,628
Dec.	7,707	1,880	100	5,790	141	3,530	906	16,963
Total	75,412	30,246	2,811	66,088	5,192	57,369	9,170	229,264
1955								
Jan.	7,044	1,570	36	5,158	213	4,451	857	21,122
Feb.	5,869	3,200	348	6,758	289	4,796	1,013	24,373
Mar.	6,538	2,340	614	6,897	240	3,807	1,167	20,778
Apr.	5,909	2,625	201	6,533	463	5,178	1,234	22,735
May	6,145	2,950	251	8,127	321	4,435	1,145	22,756
June	6,623	950	50	6,833	290	5,175	1,293	23,816
July	2,313	150	307	4,365	100	3,763	946	14,603
Aug.	5,772	2,800	210	4,794	290	3,741	1,230	22,632
Sept.	6,552	2,295	415	7,794	354	4,711	1,149	22,980
Nov.	6,606	2,433	70	13,875	387	3,795	874	23,330
Dec.	6,275	3,260	35	7,508	449	4,289	839	25,516
Total	72,418	27,599	2,622	88,461	3,960	52,994	13,034	270,251
1956								
Jan.	7,777	3,075	200	6,555	290	8,538	917	22,394
Feb.	5,974	2,435	384	5,983	275	3,592	871	19,897
Mar.	6,786	1,300	101	4,903	321	3,915	1,331	20,687

Lead Prices at New York

(Common Grade)
Monthly Average Prices
(Cents per pound)

	1953	1954	1955	1956
Jan.	14.192	13.26	15.00	16.16
Feb.	13.50	12.82	15.00	16.00
Mar.	13.404	12.94	15.00	16.00
Apr.	12.64	13.91	15.00	16.00
May	12.75	14.00	15.00	....
June	13.413	14.11	15.00	....
July	13.683	14.00	15.00	....
Aug.	14.00	14.06	15.00	....
Sept.	13.74	14.60	15.12	....
Oct.	13.50	14.975	15.50	....
Nov.	13.50	15.00	15.50	....
Dec.	13.50	15.00	15.56	....
Av.	13.485	14.06	15.14	....

Lead Sheet Prices

(To Jobbers, Full Sheets)
Monthly Average Prices
(Cents per pound)

	1953	1954	1955	1956
Jan.	19.192	18.26	20.00	21.16
Feb.	18.50	17.82	20.00	21.00
Mar.	18.404	17.94	20.00	21.00
Apr.	17.64	18.91	20.00	21.00
May	17.75	19.00	20.00	....
June	19.413	19.11	20.00	....
July	18.683	19.00	20.00	....
Aug.	19.00	19.06	20.00	....
Sept.	18.74	19.60	20.12	....
Oct.	18.50	19.975	20.50	....
Nov.	18.50	20.00	20.50	....
Dec.	18.50	20.00	20.56	....

Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers.

(In thousands of units)

	1953	1954	1955	1956
Jan.	1,571	1,788	1,478	2,005
Feb.	1,162	1,422	1,647	1,305
Mar.	1,202	1,194	1,321	1,314
Apr.	1,245	1,150	1,281	....
May	1,455	1,391	1,572	....
June	2,004	1,834	1,794	....
July	2,528	2,288	2,024	....
Aug.	2,707	2,481	2,774	....
Sept.	2,852	2,728	3,039	....
Oct.	2,825	2,667	3,036	....
Nov.	2,173	2,410	2,622	....
Dec.	1,890	1,796	2,556	....
Total	23,614	23,149	25,147	.....

Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)

(In tons of 2,000 lbs.)

	In ore and matte and in process at smelters	— In base bullion (lead content) — At smelters & refineries	In transit to refineries	In process at refineries	Refined pig lead	Antimonial lead	Total Stocks
1954							
Feb. 1	63,032	12,790	3,406	28,050	77,805	14,691	199,774
Mar. 1	63,175	12,226	4,482	28,140	83,183	14,798	206,044
Apr. 1	68,520	13,377	2,631	28,841	88,942	11,985	214,296
May 1	67,270	14,624	2,715	28,257	88,464	11,977	213,307
June 1	64,103	10,906	1,348	27,105	97,420	11,882	212,764
July 1	61,669	12,241	3,660	26,046	94,828	9,798	208,242
Aug. 1	63,093	17,196	2,592	30,301	80,820	12,210	206,212
Sept. 1	62,851	18,688	2,903	29,792	72,150	12,279	198,663
Oct. 1	63,731	18,771	4,155	29,024	79,190	14,168	209,039
Nov. 1	59,660	17,095	3,265	28,373	80,650	14,846	203,889
Dec. 1	57,452	16,888	2,570	27,816	79,814	14,573	199,113
1955							
Jan. 1	62,074	18,170	1,723	27,164	77,930	14,789	201,850
Feb. 1	59,303	15,485	3,133	29,393	69,980	14,902	192,196
Mar. 1	64,492	17,741	3,781	28,467	52,734	12,204	179,419
Apr. 1	57,577	20,063	2,309	28,564	47,496	12,385	168,394
May 1	59,686	17,468	3,496	25,373	43,207	11,749	160,979
June 1	59,632	17,705	1,941	27,979	39,892	11,055	158,204
July 1	58,182	14,707	2,941	30,579	34,432	10,233	151,074
Aug. 1	65,476	10,065	1,303	26,792	30,077	9,779	143,492
Sept. 1	75,057	17,183	3,744	29,660	26,859	7,252	159,755
Oct. 1	70,628	19,083	4,217	28,424	23,292	7,461	153,105
Nov. 1	71,257	20,682	4,276	28,596	21,828	8,085	154,724
Dec. 1	64,109	20,232	4,377	27,486	19,592	9,263	145,059
1956							
Jan. 1	71,812	16,532	3,764	27,625	21,196	9,893	150,822
Feb. 1	70,690	19,082	1,764	25,632	24,080	8,389	149,637
Mar. 1	71,023	16,406	2,583	27,519	32,355	9,095	158,981
Apr. 1	72,358	15,655	2,152	28,065	41,800	10,289	170,319

Receipts of Lead in Ore and Scrap

By U. S. Smelters (a)

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Receipts of lead in ore			Receipts of lead in scrap etc. (b)	Total receipts in ore, & scrap
	United States	Foreign	Total		
1952 Total	405,990	98,276	504,266	41,845	546,111
1953 Total	351,183	155,788	506,971	42,994	549,965
1954					
April	28,508	13,173	41,681	4,524	46,205
May	25,762	11,141	36,903	4,484	41,387
June	28,266	11,750	40,016	3,300	43,316
July	26,975	14,984	41,959	3,742	45,701
August	28,835	12,820	41,655	4,060	45,715
September	25,244	20,807	46,051	4,450	50,501
October	26,884	12,561	39,455	5,134	44,579
November	29,107	8,622	37,729	5,628	43,357
December	29,646	16,020	45,666	4,457	50,123
Total	336,291	158,081	494,372	49,864	544,236
1955					
January	28,767	11,502	40,269	3,509	43,778
February	27,456	17,400	44,856	2,738	47,594
March	30,056	11,104	41,160	3,291	44,451
April	28,707	16,347	45,054	3,249	48,303
May	28,511	13,377	41,888	4,879	48,767
June	28,273	14,667	42,940	4,509	47,449
July	23,027	3,826	26,853	649	27,502
August	30,249	11,859	42,108	3,942	46,050
September	29,377	14,881	44,258	3,623	47,881
October	30,073	20,845	50,918	5,655	56,573
November	27,736	13,022	40,758	3,802	44,560
December	29,363	24,136	53,499	3,150	56,649
Total	341,595	172,966	514,561	42,996	557,557
1956					
January	27,184	15,704	42,888	6,346	49,234
February	28,569	16,528	45,097	4,577	49,674
March	31,568	17,904	49,472	3,989	53,461

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) Inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

N. Y. Lead Price Changes

(Effective Date)

1949		1953	
Nov.	16....12.50	Jan.	7....14.50
Nov.	21....12.00	Jan.	12....14.00
1950		Feb.	2....13.50
Mar.	9....11.00	Mar.	4....13.00
Mar.	14....10.50	Mar.	10....13.50
Apr.	20....10.75	Apr.	7....13.00
Apr.	26....11.00	Apr.	16....12.50
May	4....11.25	Apr.	21....12.00
May	10....11.50	Apr.	29....12.50
May	11....12.00	May	18....12.75
June	23....11.50	May	19....13.00
1951		May	26....13.15
June	28....11.00	June	11....13.50
July	12....11.50	July	20....13.75
July	13....12.00	July	23....14.00
Aug.	15....13.00	Sept.	16....13.50
Aug.	21....14.00	1954	
Sept.	1....15.00	Jan.	18....13.00
Sept.	8....16.00	Feb.	18....12.50
Oct.	2..**19.00	Mar.	9....12.75
Oct.	31....17.00	Mar.	10....13.00
1952		Mar.	26....13.25
Apr.	29....18.00	Mar.	29....13.50
May	2....17.00	Apr.	1....13.75
May	12....15.00	Apr.	12....14.00
June	23....15.50	June	2....14.25
June	24....16.00	June	15....14.00
Oct.	7....15.00	Aug.	25....14.25
Oct.	14....14.00	Sept.	7....14.50
Oct.	22....13.50	Sept.	15....14.75
Nov.	3....14.00	Oct.	4....14.875
Nov.	10....14.20	Oct.	5....15.00
Nov.	11....14.50	1955	
Nov.	20....14.25	Oct.	23....15.00-
Nov.	24....14.00		15.50
Dec.	22....14.25	Oct.	26....15.50
Dec.	29....14.50	Dec.	29....16.00
Dec.	31....14.75	1956	
		Jan.	4....16.50
		Jan.	13....16.00

*OPA Ceiling. †Returned to OPA Ceiling. **OPS Ceiling.

Antimonial Lead Stocks at Primary Refineries

(A. B. M. S.)

(In tons of 2,000 lbs.)

End of:	1953	1954	1955	1956
Jan.	11,572	14,691	14,902	8,389
Feb.	10,736	14,798	12,204	9,095
Mar.	11,484	11,985	12,385	10,289
Apr.	11,248	11,977	11,740	.....
May	10,764	11,882	11,055	.....
June	14,335	9,798	10,233	.....
July	14,247	12,210	9,779	.....
Aug.	14,748	12,279	7,252	.....
Sept.	15,877	14,168	7,461	.....
Oct.	15,742	14,846	8,085	.....
Nov.	16,498	14,573	9,263	.....
Dec.	16,116	14,789	9,893	.....

Antimonial Lead Production by Primary Refineries

(A. B. M. S.)

(In tons of 2,000 lbs.)

End of:	1953	1954	1955	1956
Jan.	2,937	3,768	4,529	5,045
Feb.	3,682	4,257	4,777	5,888
Mar.	5,353	4,475	6,202	5,526
Apr.	5,027	4,470	5,343	....
May	6,497	4,373	4,737	....
June	9,270	3,796	4,792	....
July	5,259	5,991	1,153	....
Aug.	4,668	6,455	2,946	....
Sept.	5,509	5,869	6,650	....
Oct.	5,100	5,532	8,016	....
Nov.	5,400	5,364	7,985	....
Dec.	3,060	5,255	6,907	....
Total	61,762	59,875	64,037	.....

U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

Metal Products	1955 Dec.	1956 Jan.*	1956 Feb.
Ammunition	4,147	3,847	3,776
Bearing metals	2,847	2,913	2,415
Brass and bronze	2,074	2,718	2,670
Cable covering	10,915	11,551	10,979
Calking lead	3,964	4,693	4,055
Casting metals	1,044	1,389	1,074
Collapsible tubes	1,020	1,076	1,137
Foil	323	292	199
Pipes, traps and bends	2,011	2,405	2,284
Sheet lead	2,589	2,949	2,671
Solder	6,686	6,816	5,881
Storage batteries			
(antimonial lead)	17,272	17,101	15,489
(oxides)	16,186	16,678	14,122
Terne metal	206	130	144
Type metal	2,496	1,606	1,845
Total	73,780	76,254	68,741
Pigments:			
White lead	1,413	1,276	1,124
Red lead and litharge	7,551	7,429	6,998
Pigment colors	1,040	1,217	1,057
Other**	482	654	788
Total	10,486	10,576	9,967
Chemicals:			
Tetraethyl lead	15,283	16,437	15,849
Misc. chemicals	404	299	138
Total	15,687	16,736	15,987
Misc. Uses:			
Annealing	412	560	433
Galvanizing	210	193	102
Lead plating	80	135	87
Weights and ballast	425	488	424
Total	1,127	1,376	1,046
Other Uses Unclassified	1,953	1,901	1,257
Total Reported	103,033	†106,843	†96,996
Estimated unreported consumption	1,000	1,000	1,000
Total	104,000	107,800	98,000
Daily average‡	3,355	3,477	3,379

* Revised.

** Includes lead content of leaded zinc oxide production.

† Includes lead content of scrap used directly in fabricated products.

‡ Based on number of days in month without adjustment for Sundays or holidays.

U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	1954	1955	1956
Jan.	25,786	29,062	31,012
Feb.	25,837	28,926	30,125
Mar.	29,442	33,225	.....
Apr.	25,820	28,656	.....
May	28,637	31,092	.....
June	28,574	32,627	.....
July	25,968	26,994	.....
Aug.	25,671	26,954	.....
Sept.	30,631	34,291	.....
Oct.	30,123	34,121	.....
Nov.	30,142	34,820	.....
Dec.	28,840	29,689	.....
Total	335,887	370,794	.....

American Antimony

Monthly Average Prices in bulk, f. o. b. Laredo

(Cents per lb. in ton lots)

	1953	1954	1955	1956
Jan.	34.50	28.50	28.50	33.00
Feb.	34.50	28.50	28.50	33.00
Mar.	34.50	28.50	28.50	33.00
Apr.	34.50	28.50	28.50	33.00
May	34.50	28.50	28.50	....
June	34.50	28.50	28.50	....
July	34.50	28.50	28.50	....
Aug.	34.50	28.50	30.66	....
Sept.	34.50	28.50	33.00	....
Oct.	34.50	28.50	33.00	....
Nov.	33.68	28.50	33.00	....
Dec.	28.50	28.50	33.00	....
Av.	33.93	28.50	30.18	....

Lead Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1955 Dec.	1956 Jan.	1956 Feb.
IMPORTS			
U. S.† (s.t.)	25,153	24,555	20,416
Canada (s.t.)	2	...	...
Denmark	1,240	778	...
France	4,180	6,011	4,808
Germany (W.)‡	6,487	...	...
Italy*	1,606	860	...
Netherlands	3,889	2,762	...
Norway	1,127	...	...
Sweden	875	228	847
Switzerland	1,789	522	381
U. K. (l.t.)	17,515	...	...
India†† (l.t.)	956	1,257	...
EXPORTS			
U. S.† (s.t.)	107	40	...
Canada (s.t.)	5,286	4,888	...
Denmark	202	396	...
France	4,776	1,754	648
Germany (W.)‡	3,234	...	...
Italy*	...	300	...
Netherlands	253	257	...
N. Rhodesia†† (l.t.)	840	1,981	...
Australia†† (l.t.)	12,887	...	...

† Refined.

‡ Includes scrap.

* Includes lead alloys.

†† British Bureau of Non-Ferrous Metal Statistics.

French Lead Imports

(American Bureau of Metal Statistics)

(In Metric Tons)

	1955 Jan.-Dec.	1956 Jan.	1956 Feb.
Ore (gross weight)	108,661	8,317	9,091
Greece	2,083	895	....
Italy	1,376	787	....
Sweden	1,240	....	....
Algeria	3,771	....	84
Fr. Morocco	92,297	5,664	6,976
French Equat. Africa	6,093	....	2,031
Tunisia	1,801	971	....
Pig Lead:			
Argentiferous	405	....	....
Germany W.	5	....	....
Norway	95	....	....
Rhodesia	305	....	....
Non-argentiferous	47,755	6,011	4,808
Belgium	3,454	89	2
Germany W.	3,719	275	....
Greece	110	....	....
Norway	126	....	....
U. Kingdom	5	....	....
Algeria	282	12	13
Fr. Morocco	15,951	1,999	2,377
Tunisia	24,097	3,636	2,365
Australia	3	....	....
Other countries	8	....	51
Antimonial lead	791	....	....

Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

	Stocks at plants on Jan. 31†	Received during Feb.	Consumed during Feb.	Stocks at plants on Feb. 29
Soft lead	80,411	62,302	61,134	81,579
Antimonial lead	38,851	26,120	26,079	38,892
Lead in alloys	8,062	4,391	4,069	8,384
Lead in copper-base scrap	1,809	1,878	1,996	1,691
Total	129,133	94,691	*93,278	130,546

* Excludes 3,114 tons of lead which went directly from scrap to fabricated products and 606 tons of lead contained in leaded zinc oxide production.

† Revised.

Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

February

	Soft Lead	Antimonial Lead	Lead in Alloys	Lead in Copper-base Scrap	Total
Metal products	33,896	25,707	4,064	1,996	65,663
Pigments	9,352	9	...	...	9,361
Chemicals	15,983	4	...	...	15,987
Miscellaneous	745	263	2	...	1,010
Unclassified	1,158	96	3	...	1,257
Total	61,134	26,079	4,069	1,996	*93,278
Revised Jan. totals	67,998	28,205	4,866	2,286	103,355

* Excludes 3,114 tons of lead which went directly from scrap to fabricated products and 606 tons of lead contained in leaded zinc oxide production.

U. K. Lead Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1956 Jan.-Mar.	1956 Feb.	1956 Mar.
(Gross Weight)			
Lead and lead alloys	39,908	12,083	17,512
Australia	22,793	6,530	10,999
Canada	9,350	3,600	2,775
Belgium	2,510	925	1,085
Yugoslavia	350	...	...
United States	901	...	901
Peru	1,200	575	625
Other countries	2,804	453	1,127

Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.

(Tons of 2,000 lbs.)

	Stock Beginning	Production	Shipments: Domestic	Shipments: Export & Drawback	Shipments: Gov't Acc't	Shipments: Total	Stock at End	Unfilled Orders at End	Daily Avg. Prod.
1950 Tl.	94,221	910,354	849,246	18,189	128,256	995,691	8,884	74,795	2,494
1950 Mo. Avg.		75,863	70,770	1,516	10,688	82,974			
1951 Tl.	8,884	931,333	836,800	32,067	39,949	918,816	21,901	50,509	2,553
1951 Mo. Avg.		77,653	69,733	3,506	3,329	76,568			
1952 Tl.	21,901	961,430	803,343	56,202	36,626	896,171	87,160	45,264	2,627
1952 Mo. Avg.		80,119	66,945	4,683	3,052	74,681			
1953									
Oct.	141,561	84,031	65,470	482	1,223	67,175	158,417	25,950	2,711
Nov.	158,417	75,891	63,617	2,848	2,220	68,685	165,623	29,437	2,530
Dec.	165,623	70,116	55,487	6,282	2,127	63,896	180,843	35,466	2,552
Total	.....	971,191	818,850	16,326	42,332	877,508	.....	.....	2,661
Monthly Avg.		80,933	68,238	1,361	3,528	73,126			2,661
1954									
Feb.	198,712	68,020	57,781	7,179	1,778	66,738	199,994	28,943	2,429
Mar.	199,994	71,186	66,929	1,703	1,448	70,080	201,100	31,702	2,296
Apr.	201,100	70,255	67,512	977	2,489	70,616	200,740	31,702	2,342
May	200,740	72,645	61,859	670	2,037	64,566	209,828	38,624	2,376
June	209,828	71,466	72,257	2,297	5,685	80,239	201,055	33,100	2,385
July	201,124	70,749	59,157	1,476	13,214	73,846	198,027	38,899	2,282
Aug.	198,027	71,810	58,188	1,525	16,871	76,584	193,253	41,059	2,316
Sept.	193,253	60,137	64,548	1,072	12,265	77,885	175,505	48,818	2,004
Oct.	175,505	67,047	78,867	1,468	10,080	90,415	152,137	51,559	2,163
Nov.	152,137	80,119	77,074	2,477	18,066	97,617	134,639	44,042	2,671
Dec.	134,639	85,166	75,105	3,405	17,218	95,728	124,077	45,862	2,747
Total	.....	868,242	787,922	27,929	108,957	924,808			
Monthly Avg.		72,353	65,660	2,327	9,080	77,067			2,379
1955									
Jan.	124,277	86,076	70,863	2,644	19,694	93,201	117,152	57,421	2,777
Feb.	117,152	78,977	80,016	3,743	16,205	99,964	96,165	54,527	2,820
Mar.	96,165	89,179	79,720	1,828	12,959	94,507	90,837	60,057	2,877
Apr.	90,837	83,786	89,589	1,967	8,488	100,044	74,597	65,127	2,793
May	74,579	86,177	83,336	3,802	10,434	97,572	63,184	70,087	2,780
June	63,184	84,458	92,212	1,492	5,335	99,039	48,603	57,281	2,815
July	48,603	84,400	76,812	862	4,039	81,713	51,290	64,056	2,738
Aug.	51,290	84,874	87,042	885	2,153	90,080	46,084	73,632	2,738
Sept.	46,084	83,448	83,664	1,274	2,427	87,365	42,167	52,278	2,781
Oct.	42,167	89,449	85,770	36	1,942	87,748	43,868	61,746	2,886
Nov.	43,868	86,616	91,585	280	1,561	93,426	38,058	64,560	2,921
Dec.	38,058	92,578	87,010	684	1,963	89,657	40,979	72,908	2,986
Total	.....	1,031,018	1,007,619	19,496	87,200	1,114,316	.....	.....	....
Monthly Avg.		85,918	83,968	1,625	7,267	92,860			2,825
1956									
Jan.	40,979	90,313	87,723	1,084	1,155	89,962	41,330	60,717	2,913
Feb.	41,330	86,329	84,727	317	2,782	87,826	39,833	45,255	2,977
Mar.	39,833	91,690	84,204	460	6,821	91,485	40,038	53,070	2,958
Apr.	40,038	88,664	74,789	1,437	4,570	80,795	47,907	46,106	2,955

U. S. Consumption of Slab Zinc

Bureau of Mines

By Industries (Short Tons)

	Galvanizers	Die Casters	Brass products	Rolled zinc	Zinc oxide & other	Total
1949 Total	348,544	197,387	84,257	55,100	17,643	702,931
1950 Total	434,094	281,385	136,451	67,779	27,656	947,365
1951 Total	386,373	266,442	141,456	64,000	28,738	887,009
1952 Total	375,563	236,022	155,311	51,508	30,885	849,289
1953						
December	28,785	24,272	10,758	3,631	2,827	70,273
Total	403,162	305,346	177,301	53,784	38,037	977,636
1954						
January	26,731	21,804	10,266	4,014	3,029	65,844
February	27,243	22,184	8,486	4,035	2,230	64,178
March	31,298	26,549	9,026	4,246	2,520	73,639
April	32,970	24,176	8,181	3,933	2,395	71,655
May	32,935	22,081	8,450	3,848	3,028	70,342
June	34,827	23,534	8,860	4,214	2,880	74,665
July	33,897	17,214	6,135	3,006	2,712	63,314
August	38,225	19,891	8,349	4,030	2,684	73,529
September	37,591	20,980	8,505	3,153	3,037	73,616
October	36,407	26,051	9,501	4,181	3,055	79,545
November	34,212	30,572	10,573	3,969	2,785	82,461
December	32,263	31,781	10,961	3,350	2,987	81,342
Total	398,599	286,817	107,293	45,979	33,342	876,130
1955						
January	32,638	32,863	12,313	3,754	3,151	84,719
February	31,601	31,254	10,690	3,912	2,745	80,202
March	37,648	37,682	12,718	4,635	3,305	95,988
April	36,136	36,628	11,034	3,833	3,181	90,812
May	37,471	36,926	12,404	4,203	3,409	94,413
June	37,874	32,821	13,305	5,012	3,227	92,239
July	33,433	23,910	7,017	2,832	2,897	70,589
August	38,317	30,168	10,244	5,431	3,027	87,687
September	39,181	31,864	12,672	4,185	3,507	91,849
October	40,030	35,136	13,961	4,714	3,596	97,940
November	38,116	38,616	13,455	3,952	3,636	98,275
December	37,249	36,982	15,003	3,900	3,621	96,755
1956						
January	38,148	36,554	13,097	4,442	3,665	95,906
February	37,702	31,254	12,678	3,883	3,325	88,862

Prime Western Zinc Prices

(East St. Louis)

Average Prices, Cents Per Pound

	1953	1954	1955	1956
Jan.	12.596	9.76	11.50	13.46
Feb.	11.48	9.375	11.50	13.50
Mar.	11.024	9.66	11.50	13.50
Apr.	11.00	10.25	11.93	13.50
May	11.00	10.29	12.00	....
June	11.00	10.96	12.25	....
July	11.00	11.00	12.50	....
Aug.	11.00	11.00	12.50	....
Sept.	10.18	11.44	12.96	....
Oct.	10.00	11.50	13.02	....
Nov.	10.00	11.50	13.00	....
Dec.	10.00	11.50	13.00	....
Av.	10.857	10.69	12.305	....

High Grade Zinc Prices

(Delivered)

N. Y. Monthly Averages

(Cents per pound)

	1953	1954	1955	1956
Jan.	13.946	11.11	12.85	14.81
Feb.	12.83	10.725	12.85	14.85
Mar.	12.379	11.01	12.85	14.85
Apr.	12.35	11.60	13.28	14.85
May	12.35	11.64	13.35	....
June	12.35	12.31	13.60	....
July	12.47*	12.35	13.85	....
Aug.	12.60	12.35	13.85	....
Sept.	11.53	12.79	14.31	....
Oct.	11.35	12.85	14.37	....
Nov.	11.35	12.85	14.35	....
Dec.	11.35	12.85	14.35	....
Av.	12.207	12.04	13.655	....

*East of Continental Divide.

U. K. Zinc Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In Tons of 2,240 Pounds)

	1954	1955	1956
Jan.	25,615	29,192	29,779
Feb.	25,286	28,814	29,568
Mar.	29,001	33,451	.....
Apr.	26,084	27,741	.....
May	27,551	29,237	.....
June	29,665	31,467	.....
July	23,012	23,695	.....
Aug.	22,102	23,261	.....
Sept.	30,413	30,080	.....
Oct.	28,543	29,460	.....
Nov.	27,901	31,516	.....
Dec.	29,344	28,683	.....
Total	324,517	346,597	.....

Mine Production of Zinc in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1952				
Total	185,939	94,410	385,652	666,001
1953				
Total	183,612	57,300	293,818	534,730
1954				
Aug.	14,867	5,595	18,283	38,745
Sept.	13,702	5,540	14,936	34,178
Oct.	13,420	5,842	16,249	35,511
Nov.	12,500	5,280	20,558	38,338
Dec.	12,448	5,687	20,900	39,035
Total	166,487	63,100	234,942	464,539
1955				
Jan.	13,008	5,661	21,878	40,547
Feb.	13,124	5,075	21,437	39,636
Mar.	14,679	6,173	24,840	45,692
Apr.	13,767	6,074	23,436	43,277
May	13,563	5,842	25,200	44,605
June	13,840	5,652	24,044	43,536
July	13,400	5,340	22,643	41,383
Aug.	14,426	5,868	22,339	42,633
Sept.	13,830	5,834	22,490	42,154
Oct.	13,332	5,339	22,496	41,167
Nov.	12,676	5,532	21,347	39,555
Dec.	12,644	5,250	21,721	39,615
Total	162,289	67,640	273,871	503,800
1956				
Jan.	13,830	5,017	21,701	40,548
Feb.	13,920	5,235	22,720	41,875

*Includes Alaskan output in some months.

Mine Production of Lead in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1951				
Ttl.	7,426	152,258	230,723	390,428
1952				
Ttl.	11,252	150,302	228,607	390,161
1953				
Ttl.	9,970	136,650	188,776	335,412
1954				
Sept.	711	11,304	12,986	25,001
Oct.	692	11,826	13,237	25,755
Nov.	686	11,594	14,631	26,911
Dec.	699	11,595	14,303	26,597
Ttl.	8,608	138,940	169,804	317,352
1955				
Jan.	861	12,300	14,667	27,828
Feb.	792	12,077	14,558	27,427
Mar.	887	13,187	17,241	31,315
Apr.	940	12,417	15,329	28,686
May	987	12,037	15,908	28,932
June	900	11,918	15,609	28,427
July	828	10,925	14,030	25,783
Aug.	821	12,109	13,883	26,813
Sept.	906	11,676	14,294	26,876
Oct.	924	11,635	15,005	27,564
Nov.	762	11,731	13,482	25,975
Dec.	771	13,628	13,403	27,802
Ttl.	10,379	145,640	177,409	333,409
1956				
Jan.	780	11,633	14,113	26,526
Feb.	926	12,082	14,030	27,038

*Includes Alaskan output in some months.

Mine Production of Gold in United States

(U. S. Bureau of Mines)

(In fine ounces)

	Eastern States	Western States	Alaska*	Total
1952				
Ttl.	1,948	1,650,660	233,428	1,886,036
1953				
Ttl	1,529	1,689,668	273,479	1,964,676
1954				
Nov.	184	129,352	21,853	151,389
Dec.	173	131,960	10,000	142,133
Ttl.	1,731	1,577,216	252,794	1,831,741
1955				
Jan.	208	138,773	58	139,039
Feb.	156	134,363	72	134,591
Mar.	203	147,862	2,674	150,739
Apr.	162	145,103	15	145,280
May	144	147,595	7,287	155,026
June	156	139,993	20,668	160,817
July	140	92,322	39,661	132,123
Aug.	171	119,327	40,931	160,429
Sept.	170	139,811	52,153	192,134
Oct.	182	140,812	43,486	184,480
Nov.	168	144,837	35,530	180,535
Dec.	166	143,827	5,000	148,993
Ttl.	2,026	1,634,625	247,535	1,884,186
1956				
Jan.	121	132,919	1,977	135,017
Feb.	154	132,329	866	133,349

*Alaska totals based on mint and smelter receipts.

Mine Production of Recoverable Silver in United States

(U. S. Bureau of Mines)

(In Fine Ounces)

	Eastern States	Missouri	Western States	Alaska*	Total
1953 Total	158,707	223,500	36,354,685	39,111	36,776,003
1954					
December	12,475	23,655	3,001,230	1,500	3,038,860
Total	142,180	283,600	36,121,368	35,140	36,582,288
1955					
January	20,618	36,385	2,988,704	12	3,045,719
February	11,882	37,040	2,951,241	7	3,000,170
March	15,987	39,770	3,570,772	413	3,626,942
April	10,540	36,590	3,238,813	1	3,285,944
May	13,086	35,539	3,381,060	1,062	3,430,747
June	13,592	35,350	3,033,664	2,591	3,085,197
July	9,997	32,910	2,331,064	5,098	2,379,069
August	12,360	38,100	2,723,552	5,477	2,779,489
September	11,517	37,180	2,927,151	6,954	2,982,802
October	15,152	35,540	3,145,297	6,704	3,202,693
November	12,476	36,040	2,963,360	4,735	3,016,611
December	11,831	37,556	2,849,045	750	2,899,182
Total	159,038	438,000	36,103,723	33,804	36,734,565
1956					
January	4,664	30,880	2,869,878	316	2,911,551
February	12,252	32,430	2,983,306	82	3,028,070

*Alaska totals based on mint and smelter receipts.

**Includes a total of 3,708 oz. from Illinois.

Production of Primary Aluminum in the U. S.*

(U. S. Bureau of Mines)

(In short tons)

	1949	1950	1951	1952	1953	1954	1955	1956
Jan.	54,536	50,023	67,954	76,934	89,895	116,247	128,203	140,394
Feb.	49,749	54,493	62,740	72,374	92,649	110,483	116,236	132,762
Mar.	54,852	58,747	70,022	77,069	104,460	122,339	130,272	145,638
Apr.	54,076	58,024	67,701	76,880	102,071	120,434	126,394	.....
May	56,909	51,929	67,720	80,803	105,464	125,138	131,128	.....
June	54,184	60,400	67,454	77,476	104,152	120,758	127,634	.....
July	55,777	63,518	72,698	78,368	109,285	126,161	132,669	.....
Aug.	52,001	63,006	73,816	85,175	110,545	125,296	133,551	.....
Sept.	49,742	54,449	69,429	76,882	109,333	120,332	130,606	.....
Oct.	45,790	62,915	72,647	77,312	108,219	125,089	134,655	.....
Nov.	35,865	62,276	72,246	74,639	105,636	121,252	133,689	.....
Dec.	34,161	65,897	72,454	83,419	110,291	127,056	140,748	.....
Total	603,462	718,622	836,881	937,330	1,252,013	1,460,565	1,565,721	.....

*Based on producers' reports to War Production Board to July, 1946. Thereafter to Bureau of Mines. The monthly figures are preliminary in nature and will not add to the totals derived from the Bureau's annual industry canvass.

U. S. Silver Production*

(A.B.M.S.)

(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)

	Dom.†	For.	Total
1952 Total	40,245	36,653	76,898
1953 Total	34,697	37,764	72,461
1954			
September	2,840	3,797	6,637
October	3,117	3,126	6,243
November	3,366	2,859	6,225
December	3,169	3,453	6,622
Total	38,059	39,422	77,481
1955			
January	3,416	3,125	6,541
February	2,753	2,851	5,604
March	3,560	2,780	6,340
Apr.	3,068	2,896	5,964
May	3,075	2,224	5,299
June	3,089	3,134	6,223
July	596	930	1,526
August	2,005	1,669	3,674
September	2,840	2,855	5,695
October	2,432	3,889	6,321
November	3,087	2,775	5,862
December	3,180	3,652	6,832
Total	33,101	32,780	65,881
1956			
January	3,249	4,159	7,408
February	3,615	4,033	7,648
March	3,790	3,550	7,340

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.

† Includes purchases of crude silver by the U. S. Mint.

Average Silver Prices

(Cents per fine ounce)

	1953	1954	1955	1956
Jan.	84.44	85.25	85.25	90.357
Feb.	85.25	85.25	85.25	90.90
Mar.	85.25	85.25	85.25	91.138
Apr.	85.25	85.25	87.08	90.875
May	85.25	85.25	88.928	....
June	85.25	85.25	89.71	....
July	82.25	85.25	90.49	....
Aug.	85.25	85.25	90.75	....
Sept.	85.25	85.25	90.795	....
Oct.	85.25	85.25	91.794	....
Nov.	85.25	85.25	91.46	....
Dec.	85.25	85.25	90.45	....
Ave.	85.183	85.25	89.116	....

Note — The averages are based on the price of refined bullion imported on or after August 31, 1942.

U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

	1956		
	Jan.-Feb.	Jan.	Feb.
Ore, matte & reg. (cont.)	18,855	7,937	10,918
Canada	4,026	1,745	2,281
Mexico	2,542	1,169	1,373
Cuba	2,773	94	2,679
Bolivia	333	59	274
Chile	2,171	2,063	108
Peru	1,322	398	924
Philippines	2,389	1,119	1,270
U. of S. Africa	2,964	1,032	1,932
Australia	321	258	63
Other countries	14	...	14
Blister copper (content)	27,888	9,512	18,376
Mexico	5,833	2,849	2,984
Chile	14,473	4,250	10,223
Peru	3,420	472	2,948
Belg. Congo	551	551	...
N. Rhodesia	3,611	1,390	2,221
Refined cathodes and shapes	31,641	13,458	18,183
Canada	15,343	8,220	7,123
Mexico	992	...	992
Chile	4,508	2,010	2,498
Peru	2,181	1,180	1,001
Belgium	551	...	551
Germany (W.)	392	...	392
Norway	1,225	750	475
Sweden	112	112	...
U. Kingdom	2,649	587	2,062
Yugoslavia	28	...	28
Belg. Congo	1,198	599	599
N. Rhodesia	2,462	...	2,462
Total Imports:			
Crude & ref.	78,384	30,907	47,477
In rolls, sheets or rods	1,677	760	917
Old and scrap (content)	1,093	588	505
Composition metal (cont.)	35	35	...
Brass scrap & old (cu. cont.)	1,395	700	695

U. S. Zinc Exports

(A. B. M. S.)
(Bureau of the Census in tons of 2,000 lbs.)

	1956		
	Jan.-Feb.	Jan.	Feb.
Slabs, blocks, etc.	1,774	1,103	671
Mexico	91	36	55
Brazil	32	32	...
Chile	5	5	...
Belgium	168	...	168
U. Kingdom	1,456	1,008	448
Other countries	22	22	...
Scrap: Ashes, dross and skimmings	3,464	1,317	2,147
Semi-Fabricated forms, not elsewhere classified	729	389	340

Comparative Metal Prices

	Av. 1939	OPA 1946	1956 May 11
Copper, Domestic (Electro, Del Valley)	.1120	14.375	45.00-46.00
Lead (N. Y.)	5.05	8.25	16.00
P. W. Zinc (E. St. Louis, f. o. b.	5.05	5.05	12.50
New York, del.	....	....	14.00
Tin, Spot Straits, N. Y.	....	....	97.25
Aluminum Ingot 99%+	20.00	15.00	25.90
Antimony (R.M.M. brand, f. o. b. Laredo)	12.36	14.50	23.00

U. S. Copper Exports

(A. B. M. S.)
(Bureau of the Census in tons of 2,000 lbs.)

	1956		
	Jan.-Feb.	Jan.	Feb.
Ore, conc., matte and other unref. (cont.)	94	...	94
Refined ingots, bars, etc.†	26,620	13,301	13,319
Canada	1,066	267	799
Brazil	712	207	505
Austria	56	56	...
Belgium	24	24	...
France	11,742	5,885	5,857
Germany (W.)	3,526	1,706	1,820
Italy	2,612	279	2,333
Netherlands	1,792	1,792	...
Norway	560	280	280
Switzerland	2,085	854	1,231
U. Kingdom	1,459	1,167	292
India	950	752	198
Japan	32	32	...
Other countries	4	...	4
Total Exports:			
Crude & ref.	26,714	13,301	13,413
Pipes & tubes*	471	193	278
Wire bare	1,838	537	1,301
Building wire & cable‡	712	361	351
Weatherproof wire‡	111	83	28
Insulated copper wire n.e.s.‡	2,568	1,299	1,269

† Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper. ‡ Gross weight; n.e.s., not elsewhere specified. * Includes plates, sheets, rods, brush copper, castings, rolls, segments (finishd forms) n.e.s.

U. S. Copper Scrap Exports

(A.B.M.S.)
(Bureau of the Census; in tons of 2,000 lbs., by metal weight)

	1955	1956	
	Jan.-Dec.	Jan.	Feb.
Copper scrap, unalloyed (a) (new and old)	31,035	1,817	3,321
Canada	2,337	456	1,168
Austria	222	....	....
Belgium	739	54	95
W. Germany	19,139	1,031	1,142
Italy	354	....	....
Netherlands	242	27	47
Spain	53	....	....
Switzerland	273	95	82
U. Kingdom	6,730	....	....
India	744	....	....
Japan	142	154	751
Other countries	60	....	36
Copper-base scrap, alloyed (b) (new and old)	45,257	3,315	5,018
Canada	136	24	245
Mexico	10	....	....
Austria	267	....	88
Belgium	105	....	....
W. Germany	31,599	2,090	2,105
Italy	4,134	110	114
Netherlands	1,296	125	42
Spain	301	....	....
Switzerland	1,182	56	13
U. Kingdom	3,829	151	157
India	375	25	135
Japan	1,936	721	2,104
Other countries	87	13	15

(a) Ash, brass mill clippings, dross, flue dust, residues, scale, skimmings, wire scrap. (b) Copper-base alloys, including brass and bronze — Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor copper, skimmings, turnings, round.

U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1956		
	Jan.-Feb.	Jan.	Feb.
Ore, matte, etc. (cont.)	30,628	19,394	11,234
Canada	7,386	5,529	1,857
Mexico	656	268	388
Guatemala	1,335	695	640
Honduras	569	324	245
Bolivia	907	907	...
Peru	9,760	5,946	3,814
U. of S. Africa	6,057	2,918	3,139
Australia	3,460	2,442	1,018
Philippines	282	149	133
Korea	176	176	...
Other countries	40	40	...
Pigs and bars	44,971	24,555	20,416
Canada	3,124	1,983	1,141
Mexico	14,623	7,890	6,733
Peru	5,410	4,000	1,410
Belgium	970	259	711
Denmark	446	279	167
Germany	168	168	...
Spain	1,267	110	1,157
U. Kingdom	115	109	6
Yugoslavia	3,252	2,039	1,213
Fr. Morocco	551	551	...
Australia	14,934	7,056	7,878
Other countries	111	111	...
Total Imports:			
Ore, base bullion, ref.	75,599	43,949	31,650
Lead, scrap, dross, etc. (cont.)	4,124	2,236	1,888
Antimonial lead & typemetal	2,013	524	1,489
Lead content thereof	1,896	489	1,407

U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1956		
	Jan. Feb.	Jan.	Feb.
Zinc ore (content)	100,477	44,749	55,728
Canada	28,709	13,990	14,719
Mexico	34,949	14,453	20,496
Cuba	351	177	174
Guatemala	1,699	526	1,173
Honduras	436	308	128
Bolivia	2,536	988	1,548
Peru	24,668	13,380	11,288
U. of S. Africa	806	409	397
Australia	6,242	458	5,784
Philippines	47	26	21
Other countries	34	34	...
Zinc blocks, pigs, etc.	35,888	18,650	17,238
Canada	19,727	9,798	9,929
Mexico	3,479	1,662	1,817
Austria	1,069	683	386
Belgium	4,644	3,142	1,502
Germany (W.)	728	332	396
Italy	911	552	359
Netherlands	338	331	7
Switzerland	168	168	...
U. Kingdom	278	112	166
Belg. Congo	2,585	1,141	1,444
Australia	1,120	...	1,120
Japan	841	729	112
Total Imports:			
Zinc ore, blocks, pigs	136,365	63,399	72,966
Dross and skimmings	153	...	153
Old & worn out	50	43	7

World Production of Copper

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Canada (b)	Mexico (crude) (c)	Chile (d)	Peru (d)	Fed. Rep. of Germany (e)	Norway (f)	United Kingdom (g-h)	Yugo-slavia (c)	India (f-h)	Japan (e)	Turkey (f)	Aus-tralia (c)	Northern Rho-desia (c)	Union of South Africa (d)
1951															
Total	964,589	269,971	60,511	396,937	25,495	234,647	.....	.....	.....	.....	100,254	....	16,984	349,667	36,104
1952															
Total	961,886	258,868	60,874	422,493	22,640	206,747	11,206	163,968	36,176	7,009	104,060	2,546	21,119	336,883	37,459
1953															
Total	957,318	253,652	63,380	371,742	25,803	233,330	13,206	108,604	34,381	5,709	100,381	25,641	37,080	382,884	38,341
1954															
Nov.	88,785	26,167	5,418	29,832	2,407	21,241	1,168	9,649	2,677	728	8,322	....	3,552	32,282	3,519
Dec.	85,581	27,528	4,441	35,890	2,764	22,336	1,240	15,842	2,822	740	9,451	....	2,570	32,321	4,222
Total	863,721	302,984	59,030	372,814	29,233	258,259	14,205	152,558	33,394	8,274	117,371	27,727	42,241	386,577	43,153
1955															
Jan.	86,931	26,303	5,386	38,899	2,560	22,635	968	9,156	2,351	389	9,532	1,739	1,906	7,926	3,245
Feb.	89,078	25,088	4,495	38,630	2,400	22,171	1,031	10,712	2,175	700	10,099	2,189	4,744	16,597	3,341
Mar.	98,171	26,701	4,362	38,341	1,950	25,449	1,216	14,274	2,383	780	11,392	2,265	5,935	28,936	4,063
Apr.	93,669	25,202	4,946	38,510	2,434	24,951	1,297	8,355	2,252	740	10,906	1,335	4,114	33,467	4,468
May	95,942	25,718	4,677	38,735	2,616	24,642	1,236	11,772	2,487	743	8,096	1,953	4,501	35,301	4,639
June	90,645	27,465	5,402	38,164	2,635	23,639	1,433	14,837	3,045	718	5,655	2,252	4,308	35,166	2,700
July	31,846	26,481	5,425	35,051	2,738	23,841	1,228	9,418	3,200	717	10,810	2,305	4,300	34,306	4,548
Aug.	67,990	27,844	4,829	36,949	2,613	24,944	1,231	10,946	2,976	763	11,623	1,623	4,760	28,942	4,737
Sept.	96,343	27,502	4,745	30,914	2,544	24,096	1,479	11,396	2,793	682	11,657	....	....	33,087	4,411
Oct.	99,514	27,783	5,816	37,427	2,955	23,317	1,439	10,806	2,151	694	11,543	2,552	3,770	36,149	4,368
Nov.	94,287	27,392	5,999	40,699	2,554	24,143	1,308	12,728	2,544	782	11,868	3,010	4,826	28,749	3,844
Dec.	93,186	31,007	5,501	19,232	2,610	22,973	1,010	13,871	2,794	814	11,872	2,301	....	31,676	4,066
1956															
Jan.	96,732	28,172	6,040	30,475	593	23,826	1,329	13,597	2,436	456	11,133	....	....	32,887	....
Feb.	89,326	.....	4,965	.....	2,492	21,118	....	11,437	....	792	11,029	....	....	33,545	....
Mar.	100,272	.....	7,107	.....	2,500	.....	.....	.....	.....	.....	.....	.....	.....	32,049	.....

(a) Reported by Copper Institute. Crude, "recoverable contents of mine production or smelter production or shipments, and custom intake". Does not include intake of scrap nor of imported ore except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, ect., exported. (c) Crude copper, i. e., copper content of blister or converter copper as originally produced in the several countries, although some of it may be refined at home; e. g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. *Refined.

World Production of Refined Lead

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States	Canada	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Yugo-slavia	Japan	Aus-tralia (a)	French Moroco	Tunisia	Rho-desia	Total
1951																
Total	486,874	162,712	219,352	48,824	77,873	53,831	170,766	39,683	45,460	.....	18,516	217,301	20,287	25,476	15,646	1,602,601
1952																
Total	532,778	183,389	248,551	58,536	83,139	59,607	152,751	38,504	46,060	74,053	20,382	217,293	31,224	28,264	14,112	1,783,643
1953																
Total	523,883	166,256	225,075	66,520	84,162	60,887	164,077	40,786	53,799	78,038	25,513	241,419	29,970	30,397	12,891	1,813,773
1954																
Nov.	46,711	15,800	20,511	5,450	7,067	6,383	15,992	3,994	4,383	6,706	2,856	21,551	1,480	2,654	1,232	162,770
Dec.	46,506	15,689	21,497	5,946	7,062	6,480	13,676	4,071	5,056	7,950	3,579	22,768	364	2,578	1,008	164,230
Total	551,618	166,379	231,595	63,735	79,260	71,083	162,773	41,150	62,475	73,555	37,612	260,424	29,417	30,015	16,800	1,877,841
1955																
Jan.	44,780	12,822	19,066	4,416	7,014	5,627	12,162	4,095	5,293	7,104	3,355	23,570	4,946	3,029	1,540	158,826
Feb.	40,173	12,899	17,442	5,325	6,999	6,023	12,606	4,473	4,453	7,142	3,644	16,156	4,566	2,261	980	147,142
Mar.	50,308	14,332	19,995	5,978	7,102	6,850	14,512	4,304	5,771	6,994	3,395	17,182	1,004	2,355	672	160,754
Apr.	50,274	13,615	16,730	5,294	6,737	5,855	13,713	2,583	5,078	6,787	3,411	22,368	....	2,134	1,792	156,371
May	45,435	13,886	21,340	5,364	3,642	7,601	13,676	3,200	6,254	6,354	2,314	26,531	2,025	1,192	1,792	163,586
June	48,133	14,061	18,189	5,442	6,249	7,048	11,363	3,169	5,929	7,288	2,087	21,427	4,957	1,903	1,680	158,678
July	23,850	7,237	17,255	5,595	7,120	3,108	10,077	4,117	4,844	7,758	3,724	15,930	3,746	2,231	1,680	118,347
Aug.	36,912	11,492	19,301	5,529	7,635	4,826	10,345	2,579	4,357	7,047	3,860	23,682	2,976	2,541	1,680	144,655
Sept.	50,453	14,323	18,382	5,323	9,032	6,558	13,910	3,805	6,421	5,687	3,851	25,833	3,236	2,706	1,680	171,200
Oct.	53,747	15,326	17,225	5,760	8,777	7,044	15,387	4,828	5,709	6,260	3,579	21,946	....	1,944	1,568	169,100
Nov.	52,623	12,587	17,576	5,473	8,468	5,891	17,503	3,741	6,133	7,799	3,785	18,820	....	2,535	1,456	164,390
Dec.	50,448	12,553	18,637	7,038	8,030	6,730	16,806	4,031	5,267	7,208	3,946	21,113	1,414	3,790	1,456	168,467
1956																
Jan.	51,306	12,723	17,587	1,730	8,731	7,014	16,218	3,772	5,399	6,210	3,929	16,392	4,967	2,070	1,456	159,504
Feb.	49,475	.....	16,510	6,497	....	....	15,743	....	....	....	4,227	.....	....	1,307	1,232	.....
Mar.	54,174	.....	17,376	6,142	.....	6,241	.....	3,688	.....	.....	.....	.....	4,572	....	1,680	.....

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

World Production of Slab Zinc

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Can. (b)	Mexico	Peru (b-c)	Belgium	France (a)	Fed. Rep. of Germany	Great Britain	Italy	Nether-lands	Norway (b)	Spain	Yugo-slovia	Japan (a)	Aus-tralia (b)	Rho-desia (b)	Total (d)
1951																	
Total	931,833	218,548	57,990	1,003	220,479	82,184	155,024	78,101	52,058	24,924	44,971	23,444	....	62,109	83,103	25,301	2,065,216
1952																	
Total	961,430	223,140	61,456	5,491	205,909	83,255	162,272	76,981	60,433	28,555	43,061	23,329	15,943	77,203	97,931	25,687	2,141,088
1953																	
Total	971,191	247,707	59,589	9,819	213,215	89,218	163,430	81,436	65,730	27,721	42,566	24,152	16,037	86,833	101,003	28,370	2,228,017
1954																	
Nov.	80,116	19,622	5,061	1,704	19,208	10,602	15,335	6,891	6,510	2,438	3,850	2,132	1,470	8,699	9,552	2,072	195,319
Dec.	85,164	21,923	5,222	978	19,269	10,607	16,261	8,595	6,237	2,497	3,663	2,317	1,350	10,011	9,740	2,604	206,438
Total	868,242	218,810	60,477	16,982	234,896	122,248	184,806	90,987	74,356	28,686	48,768	25,109	15,040	112,292	117,066	29,736	2,243,501
1955																	
Jan.	86,106	22,028	5,309	1,852	19,323	10,594	16,078	7,251	5,532	2,412	3,988	2,246	1,246	9,905	9,891	2,660	206,691
Feb	78,977	19,865	4,737	1,612	18,739	10,244	14,723	7,372	5,663	2,216	3,988	1,930	1,221	8,792	8,745	2,660	190,540
Mar.	89,179	22,216	5,291	2,057	19,096	11,275	16,867	9,031	6,879	2,422	3,165	2,003	1,457	10,863	9,378	2,744	213,923
Apr.	83,786	21,301	5,136	1,770	19,279	10,582	16,409	7,392	6,393	2,519	4,168	2,198	1,421	10,750	7,737	2,632	203,473
May	86,177	21,600	5,271	1,870	20,280	11,219	16,985	6,870	6,639	2,609	4,460	2,337	1,369	7,639	8,508	2,688	206,521
June	84,458	20,565	5,173	2,124	19,837	10,715	16,476	6,480	6,480	2,628	3,854	2,227	1,285	7,141	8,837	2,604	202,444
July	84,400	21,769	5,297	1,725	19,561	10,463	16,918	5,902	6,802	2,737	4,238	2,251	1,338	11,223	10,413	2,660	207,697
Aug.	84,877	22,029	5,168	1,880	19,190	10,185	16,566	6,751	7,088	2,529	4,422	2,197	1,175	11,012	10,089	2,576	207,731
Sept.	83,448	20,898	4,967	1,754	18,863	7,603	16,496	8,609	6,323	2,621	4,451	2,121	1,198	11,227	9,817	2,464	202,860
Oct.	89,449	22,206	5,212	1,545	19,345	10,262	16,735	6,940	6,906	2,735	4,704	2,243	1,176	11,644	9,972	2,604	213,678
Nov.	87,616	21,398	5,066	818	19,244	9,848	15,708	7,442	6,183	2,846	4,501	2,185	1,142	11,600	9,860	2,576	210,265
Dec.	92,578	21,135	5,252	....	20,079	10,332	17,061	9,316	6,420	2,886	4,492	2,258	1,147	11,654	9,972	2,632	226,043
1956																	
Jan.	90,313	21,696	5,279	....	20,359	11,756	16,827	6,768	6,315	2,786	4,345	2,217	1,146	15,928	9,753	2,632	.....
Feb.	86,329	20,356	4,949	963	.....	.....	15,598	7,684	....	....	3,961	....	....	10,337	8,982	2,688	.....
Mar.	91,690	22,010	5,333	1,980	.....	9,911	.....	9,351	5,799	2,777	4,331	....	....	.....	....	2,688	.....

(a) Partially electrolytic. (b) Entirely electrolytic. (c) Beginning 1954 both electrolytic and electrothemic. (d) The above totals omits production in Russia, Czechoslovakia, Poland and in Argentina.

U. K. Virgin Copper Stocks

(In long tons)

British Bureau of Non-Ferrous Metal Statistics

At start of:	1954	1955	1956
Jan.	55,344	61,480	76,197
Feb.	60,402	62,771	79,377
Mar.	60,084	70,185	71,634
Apr.	47,258	67,566	.....
May	60,118	60,767	.....
June	65,314	58,546	.....
July	68,037	64,256	.....
Aug.	67,307	99,628	.....
Sept.	77,323	107,261	.....
Oct.	72,266	93,681	.....
Nov.	61,484	75,533	.....
Dec.	61,673	77,749	.....

U. K. Refined Lead Stocks

British Bureau of Non-Ferrous Metal Statistics

(In long tons)

At start of:	1954	1955	1956
Jan.	26,887	31,173	40,987
Feb.	32,653	32,274	34,326
Mar.	30,697	39,461	29,693
Apr.	28,312	37,587	.....
May	30,005	45,226	.....
June	29,793	38,760	.....
July	30,437	30,816	.....
Aug.	29,492	32,270	.....
Sept.	26,298	48,036	.....
Oct.	28,958	42,912	.....
Nov.	22,269	42,061	.....
Dec.	26,937	38,410	.....

U. K. Stocks of Zinc

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 lbs.)

	Virgin Zinc		Zinc. Conc.	
At start of:	1955	1956	1955	1956
Jan.	49,962	49,962	47,200	54,447
Feb.	48,027	45,239	43,779	49,537
Mar.	45,679	44,288	44,176	48,667
Apr.	49,301	.....	51,603	.....
May	53,578	.....	47,741	.....
June	50,447	.....	47,791	.....
July	48,227	.....	47,399	.....
Aug.	54,562	.....	50,649	.....
Sept.	60,985	.....	55,350	.....
Oct.	60,800	.....	55,234	.....
Nov.	54,679	.....	60,065	.....
Dec.	50,678	.....	58,414	.....

U. K. Copper Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

(Gross Weight)	1956 Jan.-Mar.	1956 Feb.	1956 Mar.
Copper and copper alloys	96,089	27,268	38,749
U. of S. Africa	306	...	301
N. Rhodesia	60,535	18,640	23,956
Canada	15,110	4,079	5,214
Belgium	1,485	52	1,291
Germany (W.)	240	15	61
Norway	65	15	50
United States	1,722	689	572
Chile	11,840	2,050	5,790
Peru	1,326	526	150
Belg. Congo	2,000	1,000	500
Other countries	1,460	202	864
Of which:			
Electrolytic	63,066	20,099	22,503
Other refined	6,060	10	3,950
Blister or rough	25,676	6,746	11,860
Wrought and alloys	1,287	413	436
Total	96,089	27,268	38,749

Copper Consumption in United Kingdom

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 pounds)

	Unalloyed	Alloyed*	Total	Virgin	Scrap
1953 Total	243,717	192,337	447,260	322,311	124,949
1954					
October	30,603	22,716	53,319	40,664	12,655
November	31,239	21,143	52,382	42,846	9,536
December	30,570	22,962	53,496	41,053	12,437
Total	328,149	251,989	580,138	448,413	131,725
1955					
January	28,636	22,582	51,218	39,705	11,513
February	27,607	23,098	50,705	36,906	13,799
March	31,901	25,894	57,795	41,083	16,712
April	26,101	22,045	48,146	36,008	12,138
May	31,107	23,297	54,404	39,485	14,919
June	36,163	23,904	60,067	45,367	14,700
July	26,601	19,698	46,299	31,749	14,550
August	24,731	18,390	43,121	33,255	9,866
September	36,286	24,007	60,293	47,180	13,113
October	36,309	25,276	61,585	47,519	14,066
November	35,791	25,854	61,645	48,690	12,955
December	32,953	23,108	56,061	41,130	14,931
Total	377,576	281,953	659,529	496,467	163,062
1956					
January	34,567	24,461	59,028	45,676	13,352
February	33,213	24,163	57,376	40,934	16,442

*Includes copper sulphate effective October, 1954.

U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

(Gross Weight)	1956 Jan.-Mar.	1956 Feb.	1956 Mar.
Zinc ore and concentrates	23,657	17,016	1,878
Zinc conc.	†	7,239	†
Australia	...	7,239	...
Zinc and zinc alloys	31,228	10,353	10,706
N. Rhodesia	1,527	420	605
Australia	800	...	600
Canada	13,513	4,363	2,325
Belgium	4,645	1,439	2,066
Germany (W.)	1,266	613	601
Netherlands	780	...	575
Norway	450	300	150
United States	1,710	400	905
Other countries	6,537	2,818	2,879
Of which:			
Zinc or spelter, unwrought in ingots, blocks, bars, slabs & cakes	31,009	10,307	10,601
Other	219	46	105
Total	31,228	10,353	10,706

† Not yet available.

Note: The above figures, unless otherwise noted, are as officially reported by the British Government. It is possible, however, that receipts from the U. S. or other countries may have originated elsewhere and have been transshipped.

Zinc Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1955 Dec.	1956 Jan.	1956 Feb.
IMPORTS			
U. S. (s.t.)	17,967	18,650	17,238
Canada (s.t.)	4	...	...
Denmark	689	390	...
France	1,600	1,360	392
Germany (W.)†	7,846	...	...
Italy	208	199	...
Netherlands	1,076	933	...
Sweden	2,355	2,735	2,062
Switzerland†	1,119	1,818	572
U. K. (l.t.)	11,672	...	...
India* (l.t.)	696	3,692	...
EXPORTS			
U. S. (s.t.)	684	1,103	671
Canada (s.t.)	14,607	15,550	...
France	...	...	11
Germany (W.)†	4,206	...	...
Italy	1,894	1,604	...
Netherlands	1,891	828	...
Norway	2,998	3,376	...
Switzerland†	408	786	184
U. K.‡ (l.t.)	314	...	...
N. Rhodesia* (l.t.)	2,259	1,968	2,304
Australia* (l.t.)	2,979	...	...
Belg. Congo	2,566	...	...

† Includes scrap.
‡ Includes manufactures.
* British Bureau of Non-Ferrous Metal Statistics.

United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

	Tin Content of Tin in Ore: Imports	Tin Content of Tin in Ore: Production*	Tin Content of Tin in Ore: Stock at end of period*	Tin Metal: Imports	Tin Metal: Production*	Tin Metal: Consumption	Tin Metal: Exports & Re-exports	Tin Metal: Stock at end of period
1954								
October	1,901	74	1,587	0	2,203	1,790	472	4,425
November	2,574	63	2,086	177	2,136	1,923	561	4,194
December	2,585	76	2,473	429	2,234	1,952	365	4,347
1955								
January	1,907	70	1,984	311	2,211	1,821	701	4,358
February	1,952	86	2,321	186	2,648	1,843	372	4,821
March	3,229	97	2,753	...	2,648	2,180	648	4,704
April	2,133	87	3,550	56	966	1,794	532	4,026
May	2,100	81	2,962	...	2,493	1,840	811	3,742
June	898	96	1,119	21	2,595	1,997	363	3,280
July	4,006	95	2,700	3	2,201	1,615	1,581	3,232
August	2,163	78	2,300	19	2,545	1,576	733	3,612
September	1,735	97	1,800	15	2,283	1,920	981	3,063
October	2,245	99	2,000	35	2,197	1,866	1,09[illegible]	2,343
November	3,034	...	....	436	....	2,081	577	2,235

*As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)
(In Tons)

	1953	1954	1955	1956
Jan.	21,830	15,001	22,678	26,739
Feb.	21,075	13,954	21,533	26,321
Mar.	22,432	21,075	25,181	.....
Apr.	21,747	20,412	24,221	.....
May	20,179	23,012	23,921	.....
June	18,384	23,344	21,981	.....
July	19,996	21,582	21,286	.....
Aug.	19,886	22,000	26,424	.....
Sept.	16,777	22,684	24,943	.....
Oct.	17,675	21,661	25,658	.....
Nov.	17,101	22,981	25,340	.....
Dec.	18,703	24,935	27,312	.....
Year	235,787	252,643	290,478.	.....

Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)
(In Tons)

	1953	1954	1955	1956
Jan.	11,212	6,170	5,500	4,888
Feb.	8,710	7,560	11,882	3,856
Mar.	14,943	11,092	10,318	....
Apr.	14,765	9,606	11,967	....
May	7,039	11,483	6,416	....
June	13,434	12,018	9,897	....
July	1,357	13,152	8,341	....
Aug.	8,869	8,646	4,884	....
Sept.	3,903	10,045	5,538	....
Oct.	7,532	8,005	8,053	....
Nov.	6,581	10,817	4,622	....
Dec.	4,354	7,815	5,286	....
Year	102,879	116,409	92,704	.....

Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)
(Fine Ounces)

	1954	1955	1956
Jan.	547,951	429,704	435,047
Feb.	567,225	457,261	196,803
Mar.	849,502	411,597	.....
Apr.	572,059	493,578	.....
May	660,724	445,054	.....
June	682,906	592,238	.....
July	1,210,045	285,350	.....
Aug.	953,379	644,932	.....
Sept.	605,188	636,992	.....
Oct.	612,874	684,301	.....
Nov.	606,274	387,147	.....
Dec.	804,213	405,719	.....
Year	8,672,340	5,873,873	.....

Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)
(In Tons)

	1953	1954	1955	1956
Jan.	7,668	9,081	11,078	15,981
Feb.	16,411	8,385	12,897	11,041
Mar.	10,578	11,671	12,423	.....
Apr.	11,153	11,218	10,321	.....
May	14,726	18,407	10,911	.....
June	15,453	14,877	13,387	.....
July	13,989	15,467	12,674	.....
Aug.	7,272	14,158	13,219	.....
Sept.	8,139	14,069	13,479	.....
Oct.	8,957	11,528	14,208	.....
Nov.	9,062	13,372	14,545	.....
Dec.	9,936	13,897	14,057	.....
Year	131,994	156,130	153,199	.....

Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)
(In Tons)

	1953	1954	1955	1956
Jan.	18,370	17,155	22,028	21,696
Feb.	18,677	15,199	19,865	20,356
Mar.	20,693	16,550	22,215	.....
Apr.	20,003	16,249	21,301	.....
May	20,090	16,530	21,599	.....
June	20,589	17,017	20,565	.....
July	21,595	17,917	21,769	.....
Aug.	21,703	18,755	22,029	.....
Sept.	21,157	18,023	20,898	.....
Oct.	21,888	18,871	22,206	.....
Nov.	21,051	19,662	21,398	.....
Dec.	21,899	21,922	21,135	.....
Year	247,707	213,810	257,008	.....

Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

	1954	1955	1956
Jan.	2,603,593	2,182,386	2,280,575
Feb.	2,068,740	1,960,506	2,094,335
Mar.	2,352,392	2,413,591	.....
Apr.	2,745,615	2,304,287	.....
May	2,564,919	2,235,620	.....
June	2,769,694	2,461,675	.....
July	2,717,859	2,385,654	.....
Aug.	2,840,385	2,480,607	.....
Sept.	2,804,384	2,386,385	.....
Oct.	2,461,823	2,371,890	.....
Nov.	2,823,719	2,088,991	.....
Dec.	2,364,826	2,388,627	.....
Year	31,117,949	27,696,319	.....

Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*
(In Tons)

	1953	1954	1955	1956
Jan.	19,502	17,716	18,959	15,906
Feb.	16,888	16,863	15,018	14,226
Mar.	14,183	17,104	19,113	.....
Apr.	18,640	19,452	17,889	.....
May	16,120	19,953	16,808	.....
June	15,302	18,988	17,800	.....
July	11,969	19,164	16,650	.....
Aug.	13,864	18,237	16,676	.....
Sept.	14,335	17,066	15,972	.....
Oct.	16,327	16,569	13,658	.....
Nov.	19,433	18,365	15,182	.....
Dec.	19,273	19,093	17,857	.....
Year	195,836	219,280	201,583	.....

*New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

	1953	1954	1955	1956
Jan.	17,478	16,625	22,181	15,550
Feb.	13,580	11,328	25,556	11,757
Mar.	18,307	18,199	20,178	.....
Apr.	17,068	17,926	21,018	.....
May	15,595	13,926	14,820	.....
June	14,919	15,654	19,581	.....
July	10,068	27,582	13,522	.....
Aug.	8,594	14,934	16,581	.....
Sept.	9,423	17,298	11,793	.....
Oct.	11,862	13,064	19,836	.....
Nov.	10,685	16,224	14,164	.....
Dec.	10,809	23,277	14,607	.....
Year	158,388	206,037	213,837	.....

Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

	1953	1954	1955	1956
Jan.	12,517	12,765	14,387	14,985
Feb.	10,662	11,874	13,375	14,997
Mar.	12,268	13,619	15,544	.....
Apr.	11,841	13,015	15,011	.....
May	11,610	13,458	15,352	.....
June	11,687	13,269	14,835	.....
July	11,801	12,901	14,530	.....
Aug.	11,911	13,428	14,825	.....
Sept.	12,031	13,521	13,734	.....
Oct.	12,469	14,323	14,411	.....
Nov.	12,764	14,159	14,290	.....
Dec.	12,122	14,947	14,881	.....
Year	143,693	161,79	175,173	.....

Canadian Zinc Exports

(Dominion Bureau of Statistics; in tons of 2,000 lbs.)

	Jan.–Dec. 1955	Dec. 1955	Jan. 1956
Ore (zinc content)	190,582	16,507	16,954
To U. S.	168,067	11,892	16,954
Belgium	7,487	1,591	....
France	4,613	3,024	....
Norway	2,170	....	....
U. Kingdom	8,245	....	....
Slab zinc	213,837	14,607	15,550
To U. S.	113,308	8,304	9,599
Brazil	55	....	....
Chile	73	....	....
Netherlands	112	....	....
U. Kingdom	95,601	6,282	5,951
Korea	115	....	....
India	3,259	....	....
Iran	165	....	....
Pakistan	1,026	....	....
Other countries	123	21	....
Total Exports:			
Ore & slabs	404,419	31,114	32,504
Zinc scrap, dross, ashes	5,463	233	320
To U. S.	1,206	20	43
Belgium	2,293	....	82
Germany W.	545	85	85
Netherlands	1,260	128	110
Japan	129	....	....
Italy	30	....	....

Canadian Copper Exports

(Dominion Bureau of Statistics; in tons of 2,000 lbs.)

	Jan.–Dec. 1955	Dec. 1955	Jan. 1956
Ore, matte, regulus, etc. (content)	41,564	3,807	3,433
To U. S.	26,883	2,294	1,816
Belgium	400	43	....
Germany W.	1,827	617	....
Norway	11,325	727	1,559
U. Kingdom	1,129	126	58
Ingots, bars, billets, anodes	153,197	14,057	15,981
To U. S.	67,068	7,982	8,310
Brazil	495	....	1
Denmark	168	....	....
France	8,957	1,137	784
Germany W.	937	....	....
Italy	116	....	....
Netherlands	198	....	....
Switzerland	308	....	....
U. Kingdom	69,199	4,931	6,886
Australia	3,994	....	....
India	1,724	....	....
Other countries	33	7	....
Total Exports:			
Crude and Refined	194,761	17,864	19,414
Old & Scrap	18,293	1,001	561
Rods, strips, sheet and tubing	19,161	1,777	1,621

French Metal Exports

(American Bureau of Metal Statistics)
(In Metric Tons)

	1955 Jan.-Dec.	1956 Jan.	1956 Feb.
Lead			
Ore (gross weight)	1,128	7	2
Pig Lead:			
Argentiferous	76	....	....
Non-argentiferous	13,740	1,754	648
Antimonial lead	550	22	28
Zinc			
Slabs, bars, blocks, etc.	609	....	11

Copper Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in ingots, slabs, etc.; metric tons except where otherwise noted.

	1955 Dec.	1956 Jan.	1956 Feb.
IMPORTS			
U. S. (blist., s.t.)	23,841	9,512	18,376
(ore, etc., s.t.)	11,489	7,937	10,918
(ref., s.t.)	20,682	13,458	18,183
Denmark	260	424	...
France (crude)	15	914	...
(refined)	17,442	9,086	16,117
Italy	8,624	13,139	...
Germany, (W.)	17,198	...	...
Netherlands	1,629	2,509	...
Norway	305	567	...
Sweden	2,460	5,988	2,968
Switzerland	3,253	2,097	1,861
U. K. (l.t.)	34,962	...	...
India†† (ref., l.t.)	1,462	1,158	...
Australia†† (blist. & ref., l.t.)	500	...	...
EXPORTS			
U. S. (ore and unref., s.t.)	258	...	94
refined, s.t.)	14,728	13,301	13,319
Canada (ref., s.t.)	14,057	15,981	...
Finland‡	121	57	...
Germany (W.)	6,069	...	...
Norway	1,721	1,600	...
Sweden	1,554	1,562	992
U. K. (l.t.)	2,004	...	...
Turkey†	1,408	...	...
N. Rhodesia†† (ref. & blist., l.t.)	26,000	29,381	31,984

† Includes copper alloys.

‡ Includes old.

†† British Bureau of Non-Ferrous Metal Statistics.

French Zinc Imports

(American Bureau of Metal Statistics)
(In Metric Tons)

	1955 Jan.-Dec.	1956 Jan.	1956 Feb.
Ore (gross weight)	290,133	21,619	22,595
Canada	6,167	5,083	....
Guatemala	999	....	....
Bolivia	920	....	....
Peru	35,874	546	4,061
Belgium	3,637	....	....
Finland	2,997	....	....
Germany W.	2,637	....	....
Greece	6,379	....	545
Italy	14,118	821	2,514
Norway	1,005	....	....
Spain	41,644	3,920	2,548
Yugoslavia	30,549	....	....
Algeria	48,888	1,500	....
Fr. Morocco	73,894	3,806	11,431
Tunisia	10,053	1,521	480
Belg. Congo	8,757	....	....
Australia	1,615	4,422	516
Burma	....	....	500
Slabs, bars, blocks, etc.	14,923	1,360	392
Belgium	13,480	1,360	290
Germany W.	100	....	....
Italy	791	....	....
Netherlands	280	....	....
Switzerland	5	....	....
U. Kingdom	12	....	2
Algeria	209	....	....
Tunisia	1	....	....
Rhodesia	42	....	....
Australia	3	....	....
Mexico	....	....	100

U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1956 Jan.-Mar.	1956 Feb.	1956 Mar.
(Gross Weight)			
Copper unwrought, ingots, blocks, slabs, bars, etc.	5,386	2,605	926
Plates, sheets, rods, etc.	4,384	1,392	1,182
Wire (including uninsulated electric wire)	14,928	3,680	5,008
Tubes	2,618	870	895
Other copper, worked (incl. pipe fittings)	272	94	96
Total	27,588	8,641	8,107

Note: The above figures are as officially reported by the British Government. However, it is possible that receipts from the U. S. or other countries may have originated elsewhere and have been transshipped.

French Copper Imports

(American Bureau of Metal Statistics)
(In Metric Tons)

	1955 Jan.-Dec.	1956 Jan.	1956 Feb.
Crude copper for refining (blister, black & cement)	6,131	914	....
Belgium	....	102	....
Belg. Congo	4,980	812	....
U. of S. Africa	1,128	....	....
Fr. Morocco	23	....	....
Refined	165,064	9,086	16,117
United States	53,531	3,920	6,362
Canada	8,470	51	871
Chile	150	....	....
Peru	277	....	....
Belgium	48,626	1,992	3,755
Germany W.	1,906	....	406
Norway	576	762	....
Sweden	117	....	....
U. Kingdom	987	5	269
Turkey	95	....	....
Belg. Congo	37,019	1,085	2,740
U. of S. Africa	1,123	....	10
Rhodesia-Nyasaland	10,545	1,271	1,668
Japan	1,598	....	....
Other countries	44	....	38
Total Imports:			
Crude and refined	171,195	10,000	16,117

Canadian Lead Exports

(Dominion Bureau of Statistics; in tons of 2,000 lbs.)

	Jan.–Dec. 1955	Dec. 1955	Jan. 1956
Ore (lead content)	58,162	5,532	2,496
To U. S.	31,221	2,849	2,496
Belgium	16,522	1,281	....
Germany W.	10,419	1,402	....
Refined Lead	92,703	5,286	4,888
To U. S.	34,287	1,802	1,629
Cuba	1	....	....
Venezuela	85	....	44
Belgium	66	....	....
Norway	56	....	....
U. Kingdom	56,869	3,472	3,192
Japan	1,274	....	23
Other countries	65	12	....
Total Exports:			
Ore and refined	150,865	10,818	7,384
Pipe & tubing	22	1	2
Lead scrap	627	29	....

Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL
(Bureau of Census — Thousands of Pounds)

	Aluminum	Copper	Magnesium	Zinc	Lead Die
1951 Total	515,131	1,197,443	30,825	487,996	25,936
1952 Total	518,979	1,009,910	34,857	408,353	20,941
1953 Total	658,022	990,496	34,517	521,253	20,444
1954					
September	46,249	68,267	2,059	36,594	1,625
October	53,901	70,276	2,092	39,072	1,784
November	55,224	70,020	2,161	48,437	1,355
December	62,752	72,421	2,287	50,177	1,563
Total	607,764	834,557	25,572	474,741	18,396
1955					
January	64,414	72,233	2,305	58,586	1,734
February	66,869	75,253	2,160	58,585	1,571
March	78,958	92,149	2,572	71,811	1,537
April	73,049	84,183	2,633	71,595	1,614
May	71,691	85,008	2,399	63,735	1,530
June	68,473	90,476	2,367	66,569	2,045
July	55,033	65,816	1,920	47,928	1,684
August	64,864	87,206	2,176	62,677	1,904
September	67,170	89,600	2,478	62,030	1,924
October	72,197	91,192	2,302	71,689	1,789
November	75,065	90,345	2,325	75,099	1,896
December	75,275	88,287	2,255	70,950	1,817
Total	833,058	1,011,748	27,892	781,254	21,045
1956					
January	74,152	89,767	2,959	68,050	1,598
February	73,096	91,706	2,977	66,584	1,636

Copper Castings Shipments

BY TYPE OF CASTING
(Bureau of Census) **(Thousands of Pounds)**

	Total	Sand	Permanent Mold	Die	All Other
1951 Total	1,197,443	1,075,437	69,883	12,516	39,607
1952 Total	1,009,910	910,862	63,865	8,259	26,924
1953 Total	990,496	888,369	61,316	10,077	30,734
1954					
August	68,891	63,389	3,547	429	1,496
September	68,267	62,152	3,637	548	1,930
October	70,276	63,855	3,619	521	2,281
November	70,020	63,065	4,089	507	2,359
December	72,421	65,159	4,346	482	2,434
Total	834,557	751,804	48,849	6,480	27,394
1955					
January	72,233	64,540	4,678	591	2,424
February	75,253	67,768	4,598	641	2,246
March	92,149	83,149	5,649	742	2,609
April	84,183	75,903	5,152	654	2,474
May	85,008	76,064	5,513	764	2,667
June	90,476	80,869	5,840	739	3,028
July	65,816	59,138	3,998	691	1,989
August	87,206	77,721	5,322	844	2,412
September	89,600	80,481	5,603	692	2,824
October	91,192	82,958	4,513	727	2,994
November	90,345	80,934	5,807	743	2,861
December	88,287	78,327	6,368	713	2,879
Total	1,011,748	907,852	63,041	8,541	31,408
1956					
January	89,767	80,116	6,135	799	2,717
February	91,706	82,244	5,888	727	2,847

Nickel Averages

Electro, cathode sheets, 99.00%, f.o.b. refinery, duty included
(Cents per pound)

	1953	1954	1955	1956
Jan.	58.62	60.00	64.50	64.50
Feb.	60.00	60.00	64.50	64.50
Mar.	60.00	60.00	64.50	64.50
Apr.	60.00	60.00	64.50	64.50
May	60.00	60.00	64.50	....
June	60.00	60.00	64.50	....
July	60.00	60.00	64.50	....
Aug.	60.00	60.00	64.50	....
Sept.	60.00	60.00	64.50	....
Oct.	60.00	60.00	64.50	....
Nov.	60.00	60.98	64.50	....
Dec.	60.00	64.50	64.50	....
Av.	59.885	60.46	64.50	....

Platinum Averages

N. Y. MONTHLY QUOTATIONS
(Dollars per Troy Ounce)

	1953	1954	1955	1956
Jan.	91.50	91.40	81.00	106.30
Feb.	91.50	91.00	78.16	104.34
Mar.	91.50	87.88	78.00	104.23
Apr.	91.50	85.50	77.94	103.92
May	91.50	85.50	77.50	....
June	92.81	85.50	78.33	....
July	94.00	85.50	81.78	....
Aug.	94.00	85.50	84.59	....
Sept.	92.50	85.50	91.96	....
Oct.	92.50	83.62	94.60	....
Nov.	92.50	81.07	103.11	....
Dec.	92.15	80.64	106.58	....
Av.	92.496	85.72	86.12	....

Prompt Tin Prices

(Straits, Open Market, N. Y.)
Monthly Average Prices
(Cents per pound)

	1953	1954	1955	1956
Jan.	121.50	84.84	87.628	104.768
Feb.	121.50	85.04	90.75	100.586
Mar.	121.415	91.24	91.065	100.524
Apr.	101.07	96.238	91.41	99.145
May	97.387	93.51	91.38	....
June	92.933	94.24	93.64	....
July	81.826	96.55	96.825	....
Aug.	80.69	93.381	96.456	....
Sept.	82.275	93.536	96.256	....
Oct.	80.897	93.00	96.075	....
Nov.	83.26	91.099	97.882	....
Dec.	84.693	88.571	107.75	....
Av.	95.787	91.77	94.73	....

Monthly Tin Production at Longhorn Smelter

(From Concentrates)

(In tons of 2,240 pounds)

	1953	1954	1955	1956
Jan.	4,000	2,700	2,402	1,754
Feb.	3,400	3,008	2,505	1,704
Mar.	3,850	3,559	2,353	1,802
Apr.	3,750	3,006	2,103	1,803
May	3,100	2,054	1,604	....
June	3,000	1,205	851	....
July	3,000	NIL	950	....
Aug.	2,600	2,002	1,749	....
Sept.	2,700	2,404	1,751	....
Oct.	2,751	2,404	1,803	....
Nov.	2,750	2,404	1,803	....
Dec.	2,750	2,404	2,453	....
Total	37,651	27,150	22,327	....

Quicksilver Averages

N. Y. Monthly Averages
Virgin, Dollars per 76-lb. Flask

	1953	1954	1955	1956
Jan.	214.88	189.60	324.68	277.88
Feb.	207.37	190.00	324.68	270.29
Mar.	199.92	201.63	322.61	261.40
Apr.	197.90	221.36	318.14	267.22
May	196.50	251.20	306.62	.....
June	193.42	273.46	286.98	.....
July	192.21	287.40	268.22	.....
Aug.	190.42	290.71	255.18	.....
Sept.	187.04	314.08	263.70	.....
Oct.	184.62	329.50	279.02	.....
Nov.	186.00	321.17	282.50	.....
Dec.	188.38	319.96	282.27	.....
Av.	194.89	265.84	292.90	.....

Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

	Stocks beginning of month short tons	Production short tons	Sold or Used Short tons	Sold or Used Value f. o. b. plant	Stocks end of month short tons
1954					
November	35,152	121,252	128,875	53,113,532	27,529
December	27,529	127,035	133,420	55,035,578	21,144
1955					
January	21,144	128,203	129,306	$53,466,480	20,041
February	20,041	116,236	121,819	51,144,168	14,458
March	14,458	130,272	132,760	57,270,040	11,970
April	11,970	126,394	124,415	51,646,568	13,949
May	13,949	131,128	133,025	57,605,872	12,052
June	12,052	127,634	127,056	55,009,348	12,630
July	12,630	132,669	128,961	55,822,814	16,338
August	16,338	133,551	136,472	59,965,645	13,417
September	13,417	130,606	134,125	60,205,054	9,898
October	9,898	134,655	128,116	57,924,207	16,437
November	16,437	133,689	135,953	61,464,364	14,173
December	14,173	140,748	139,901	63,319,738	15,020
1956					
January	15,020	140,394	135,598	$61,362,549	19,816

Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS

(Bureau of Census — Thousands of Pounds)

	Total	Plate, Sheet, & Strip	Rolled Structural Shapes, Rod, Bar & Wire	Extruded Shapes Tube Blooms & Tubing	Powder, Flake, & Paste
1952 Total	1,924,750	1,085,699	443,546	347,542	47,963
1953 Total	2,286,865	1,368,165	422,946	451,922	44,732
1954					
October	180,359	100,787	26,954	48,878	3,731
November	181,822	103,778	26,465	48,483	3,096
December	195,595	108,656	30,269	53,565	3,005
Total	2,088,439	1,165,090	357,229	518,070	46,255
1955					
January	206,175	114,040	28,193	54,588	3,465
February	205,198	112,033	26,559	61,920	4,716
March	234,730	128,432	31,051	71,981	3,266
April	227,939	123,293	29,835	72,017	2,794
May	234,309	125,176	30,979	75,371	2,813
June	255,701	136,420	35,306	74,792	3,035
July	210,222	113,305	27,070	62,918	2,379
August	250,036	141,400	29,413	67,904	3,039
September	244,135	134,240	32,973	67,407	2,926
October	248,806	138,328	30,554	71,456	2,926
November	245,256	137,109	31,656	67,798	2,658
December	242,993	138,592	31,802	64,159	1,837
Total	2,805,500	1,542,368	365,391	812,311	35,854
1956					
January	251,772	142,049	34,008	67,499	2,118
February	240,999	134,077	33,727	65,261	1,901

Aluminum Castings Shipments

(Bureau of Census)

BY TYPE OF CASTING

(Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1951 Total	515,131	193,378	160,011	151,465	10,277
1952 Total	518,979	194,616	146,883	169,732	7,748
1953 Total	658,022	214,553	200,025	239,330	4,114
1954					
November	55,224	12,934	20,396	21,296	598
December	64,054	13,753	23,629	26,017	646
1955					
January	64,414	13,358	23,679	26,819	558
February	66,869	13,579	24,319	28,234	737
March	78,958	16,019	29,029	33,229	682
April	73,049	14,041	28,028	30,208	772
May	71,691	14,235	25,597	31,243	616
June	68,473	14,920	24,682	27,939	932
July	55,033	11,716	21,006	21,656	655
August	64,864	14,916	22,267	27,004	576
September	67,170	14,870	23,075	28,532	693
October	72,197	14,485	25,135	31,741	836
November	75,065	14,327	26,267	33,852	619
December	75,275	15,291	25,031	34,347	606
1955 Total	833,058	171,757	298,115	354,804	8,282
1956					
January	74,152	15,861	24,528	33,253	510
February	73,096	15,560	23,963	32,949	624

Virgin Aluminum

Virgin 99% Delivered Monthly Average Prices

(Cents per pound)

	1953	1954	1955	1956
Jan.	20.173	21.50	22.90	24.40
Feb.	20.50	21.50	23.20	24.40
Mar.	20.50	21.50	23.20	24.60
Apr.	20.50	21.50	23.20	25.90
May	20:50	21.50	23.20	....
June	20:50	21.50	23.20	....
July	20.962	21.50	23.20	....
Aug.	21.50	22.12	24.26	....
Sept.	21.50	22.20	24.40	....
Oct.	21.50	22.20	24.40	....
Nov.	21.50	22.20	24.40	....
Dec.	21.50	22.20	24.40	....
Av.	20.928	21.785	23.655	....

Magnesium Wrought Products Shipments

(Bureau of Census)

(Thousands of Pounds)

	1953	1954	1955	1956
Jan.	1,313	972	1,776	2,118
Feb.	1,601	1,136	1,648	1,901
Mar.	1,601	1,136	1,947	1,946
Apr.	1,708	892	1,756	....
May	1,699	1,129	1,836	....
June	1,192	1,312	1,686	....
July	1,589	1,032	1,437	....
Aug.	1,433	1,111	1,742	....
Sept.	1,254	1,183	2,159	....
Oct.	1,409	1,002	1,667	....
Nov.	1,314	1,243	1,955	....
Dec.	919	1,673	1,577	....
Total	16,885	13,743	21,186	.....

Cadmium Averages

N. Y. Monthly Averages

Cents per lb. in ton lots

	1953	1954	1955	1956
Jan.	193.00	200.00	170.00	170.00
Feb.	200.00	170.00	170.00	170.00
Mar.	200.00	170.00	170.00	170.00
Apr.	200.00	170.00	170.00	170.00
May	200.00	170.00	170.00	.....
June	200.00	170.00	170.00	.....
July	200.00	170.00	170.00	.....
Aug.	200.00	170.00	170.00	.....
Sept.	200.00	170.00	170.00	.....
Oct.	200.00	170.00	170.00	.....
Nov.	200.00	170.00	170.00	.....
Dec.	200.00	170.00	170.00	.....
Av.	199.44	172.50	170.00	.....

Steel Ingot Production

(American Iron and Steel Institute)

Period	Estimated Production — All Companies OPEN HEARTH Net tons	Per cent of capacity	BESSEMER Net tons	Per cent of capacity	ELECTRIC Net tons	Per cent of capacity	TOTAL Net tons	Per cent of capacity	Calculated weekly production, all companies (net tons)
1952 Total	82,846,439	87.2	3,523,677	65.5	6,797,923	82.6	93,168,039	85.8	1,782,097
1953 Total	100,473,823	97.9	3,855,705	83.2	7,280,191	71.1	111,609,719	94.9	2,140,578
1954									
December	7,530,204	81.4	231,196	57.0	525,743	59.4	8,287,073	78.6	1,874,903
Total	80,327,494	73.6	2,548,104	53.2	5,436,054	52.0	88,311,652	71.0	1,693,741
1955									
January	8,054,345	86.0	199,229	49.0	584,162	68.6	8,837,736	82.7	1,994,974
February	7,734,884	91.5	197,091	53.7	564,959	68.1	8,496,939	88.9	2,124,233
March	9,060,026	96.7	255,493	62.8	666,235	72.6	9,981,754	93.4	2,253,218
April	8,858,549	97.7	275,069	69.8	681,477	76.6	9,815,095	94.8	2,287,901
May	9,307,291	99.4	305,347	75.1	715,678	77.9	10,328,316	96.6	2,331,448
June	8,764,430	96.6	283,544	72.0	698,493	78.6	9,746,467	94.1	2,271,904
July	8,232,535	88.1	268,348	66.1	600,063	65.5	9,100,946	85.3	2,059,038
August	8,600,612	91.8	298,872	73.5	694,961	75.7	9,594,545	89.7	2,165,812
September	8,829,266	97.6	307,171	78.2	745,888	84.1	9,882,325	95.7	2,308,954
October	9,369,704	100.0	330,150	81.2	801,196	87.3	10,501,050	98.2	2,370,440
November	9,141,244	100.8	306,674	77.9	799,480	89.9	10,247,398	99.0	2,388,671
December	9,390,000	100.5	292,000	72.0	786,000	85.8	10,468,000	98.1	2,368,000
Total	105,342,886	95.6	3,319,088	69.3	8,338,592	77.2	117,000,566	93.0	2,243,969
1956									
January	9,676,151	101.4	323,235	79.5	828,845	86.6	10,828,231	99.3	2,444,296
February	9,043,064	101.3	296,543	78.0	779,388	87.1	10,118,995	99.2	2,444,202
March	9,795,263	102.7	310,060	76.3	819,465	85.7	10,924,788	100.2	2,466,092
April	9,443,000	102.3	306,000	77.8	798,000	86.2	10,547,000	100.0	2,459,000

Blast Furnace Output

(American Iron and Steel Institute)

	net tons Pig Iron	Ferro-manganese & Spiegel	Total	% Capacity
1947				
Ttl. Yr.	58,507,169	702,561	59,209,730	90.1
1948				
Ttl. Yr.	60,135,941	712,899	60,848,840	90.2
1949				
Ttl. Yr.	53,613,779	592,564	54,206,343	76.9
1950				
Ttl. Yr.	64,810,272	673,896	65,484,168	91.5
1951				
Ttl. Yr.	70,487,380	745,381	71,232,761	98.3
1952				
Ttl. Yr.	61,528,665	629,926	62,158,591	84.2
1953				
Total	74,987,721	855,038	75,842,759	95.5
1954				
Jan.	5,516,689	62,824	5,579,513	80.1
Feb.	4,764,413	45,941	4,810,564	76.8
Mar.	4,907,147	52,156	4,959,303	71.2
Apr.	4,449,289	53,277	4,502,566	66.7
May	4,572,252	52,187	4,624,439	66.4
June	4,685,629	40,521	4,726,150	70.0
July	4,590,076	36,108	4,626,184	66.6
Aug.	4,529,291	37,744	4,567,035	71.0
Sept.	4,417,888	43,934	4,461,822	66.3
Oct.	4,937,436	46,244	4,983,680	71.5
Nov.	5,204,446	52,454	5,256,900	77.9
Dec.	5,526,720	59,793	5,586,513	80.4
Total	58,119,382	568,735	58,688,117	71.6
1955				
Jan.	5,729,404	55,249	5,784,653	81.1
Feb.	5,364,585	48,182	5,442,767	84.5
Mar.	6,406,902	57,049	6,463,951	90.6
Apr.	6,329,927	54,712	6,384,639	92.4
May	6,753,236	51,699	6,804,935	95.4
June	6,495,056	48,735	6,543,878	94.7
July	6,329,393	61,166	6,390,559	89.8
Aug.	6,529,580	71,902	6,601,482	92.5
Sept.	6,653,578	49,788	6,703,366	97.3
Oct.	6,905,280	59,993	6,965,278	97.6
Nov.	6,636,649	62,341	6,698,990	97.0
Dec.	6,887,667	65,849	6,953,516	97.7
Total	77,114,073	868,758	77,800,831	92.7
1956				
Jan.	6,985,945	63,619	7,049,564	97.1
Feb.	6,539,199	63,618	6,602,817	97.2
Mar.	7,983,877	65,566	7,149,443	98.5

Steel Castings Shipments

(Bureau of Census)

	(Short Tons) Total	For Sale	For Own Use
1950	1,461,667	929,192	374,217
1951	2,101,604	1,507,413	594,191
1952	1,925,116	1,476,352	448,767
1953			
Dec.	123,281	91,017	32,264
Total	1,829,277	1,290,016	431,330
1954			
Jan.	122,758	93,577	29,181
Feb.	116,520	88,699	27,821
Mar.	122,310	92,271	30,039
Apr.	105,788	78,754	27,034
May	94,610	70,596	24,014
June	100,022	72,881	27,141
July	75,848	53,207	22,641
Aug.	89,590	66,792	22,798
Sept.	88,359	64,722	23,637
Oct.	87,085	64,004	23,081
Nov.	87,659	64,812	22,847
Dec.	93,547	69,843	23,704
Total	1,184,096	880,158	303,938
1955			
Jan.	98,238	75,044	23,194
Feb.	106,430	80,729	25,701
Mar.	127,460	98,926	28,534
Apr.	120,053	92,237	27,816
May	122,465	92,713	29,752
June	133,887	102,457	31,430
July	97,875	71,170	26,705
Aug.	126,406	96,290	30,116
Sept.	140,843	107,622	33,221
Oct.	145,674	110,409	35,265
Nov.	152,381	116,908	35,473
Dec.	158,982	122,201	36,781
Total	1,530,694	1,166,706	363,988
1956			
Jan.	158,618	123,343	35,275
Feb.	165,398	128,598	36,800

GALVANIZED SHEET SHIPMENTS

(American Iron & Steel Institute)

(Net Tons)

	1953	1954	1955	1956
Jan.	201,472	169,086	211,101	269,464
Feb.	183,503	167,433	199,408	272,997
Mar.	204,995	180,198	238,649	291,193
Apr.	196,656	203,312	239,001	.....
May	189,765	201,671	235,962	.....
June	184,862	200,456	246,940	.....
July	185,896	214,849	205,211	.....
Aug.	187,741	207,113	241,863	.....
Sept.	194,257	209,765	269,020	.....
Oct.	208,705	209,498	260,010	.....
Nov.	177,391	195,190	255,692	.....
Dec.	175,375	205,561	261,640	.....
Total	2,290,868	2,362,632	2,964,497	.....

SHIPMENTS of TIN-TERNE PLATE

(American Iron & Steel Institute)

(Net Tons)

	Hot Dipped 1955	1956	Electrolytic 1955	1956
Jan.	82,874	81,034	335,682	402,627
Feb.	88,189	77,877	344,467	404,193
Mar.	94,434	133,257	419,574	598,129
Apr.	89,492	.....	441,194	.....
May	125,579	.....	481,805	.....
June	130,603	.....	520,305	.....
July	76,473	.....	291,405	.....
Aug.	111,482	.....	441,201	.....
Sept.	116,295	.....	471,624	.....
Oct.	60,355	.....	249,790	.....
Nov.	59,269	.....	240,503	.....
Dec.	65,363	.....	263,087	.....
Total	1,100,762	.....	4,503,637	.....

Steel Ingot Operations

(Percentage of Capacity as Reported by American Iron & Steel Institute)

Week Beginning	1953	1954	1955	1956
Jan. 2	98.2	75.4	81.2	97.6
Jan. 9	99.3	74.3	83.2	98.6
Jan. 16	99.7	74.1	83.2	99.0
Jan. 23	99.4	75.6	85.0	100.4
Jan. 30	97.7	74.4	85.4	99.3
Feb. 6	99.7	74,4	86.8	99.1
Feb. 13	99.1	74.6	89.1	98.8
Feb. 20	99.4	73.6	90.8	98.8
Feb. 27	100.3	70.7	91.9	99.9
Mar. 5	101.3	69.3	92.9	100.0
Mar. 12	101.5	67.6	94.2	100.6
Mar. 19	103.1	68.1	93.7	99.5
Mar. 26	97.1	69.1	94.4	99.6
Apr. 2	98.9	68.0	95.3	97.7
Apr. 9	98.8	68.0	94.6	100.9
Apr. 16	101.0	68.6	94.6	100.2
Apr. 23	100.3	68.7	95.6	100.5
Apr. 30	100.2	69.4	96.6	96.4
May 7	100.3	70.9	97.2	96.5
May 14	99.8	71.8	96.9	...
May 21	100.3	71.2	96.4	...
May 28	99.6	70.2	95.8	...
June 4	97.9	73.2	94.7	...
June 11	96.8	72.3	96.0	...
June 18	96.8	72.1	95.0	...
June 25	91.8	65.8	71.1	...
July 2	92.8	60.0	85.9	...
July 9	94.7	64.3	91.2	...
July 16	94.4	65.3	91.0	...
July 23	92.6	64.2	90.7	...
July 30	94.0	64.0	86.9	...
Aug. 6	95.2	64.0	89.4	...
Aug. 13	95.9	61.8	90.2	...
Aug. 20	93.4	63.5	90.6	...
Aug. 27	90.5	64.0	93.4	...
Sept. 3	89.2	63.0	93.8	...
Sept. 10	91.4	66.3	95.7	...
Sept. 17	95.1	68.7	96.1	...
Sept. 24	95.3	70.4	97.0	...
Oct. 1	95.2	71.0	96.7	...
Oct. 8	96.3	72.8	96.5	...
Oct. 15	95.0	73.6	98.9	...
Oct. 22	94.6	74.5	100.0	...
Oct. 29	93.0	76.4	99.4	...
Nov. 5	92.3	77.2	99.6	...
Nov. 12	90.7	79.3	99.2	...
Nov. 19	86.8	80.3	100.1	...
Nov. 26	87.5	81.4	97.6	...
Dec. 3	86.7	82.5	100.1	...
Dec. 10	84.3	81.5	100.3	...
Dec. 17	64.1	72.4	96.9	...
Dec. 24	75.7	77.6	95.7	...
Dec. 31	...	...	...	...

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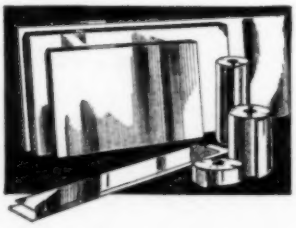

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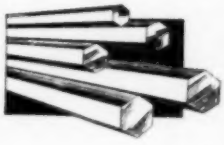

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